

195. (New) The method of claim 187, wherein said video image is received in one of a television and a multichannel information transmission.

196. (New) The method of claim 195, wherein said one of a television and a multichannel information transmission comprises an analog television signal.

197. (New) The method of claim 187, wherein said receiver station includes a video monitor which outputs said video presentation, wherein said video presentation comprises a series of computer generated video display outputs, and wherein by processing said at least one user specific subscriber datum said at least one processor delivers said generated image at said video monitor in one of said series of computer generated display outputs, said method further comprising the step of receiving said at least one user specific subscriber datum from a remote data source.

## **II. REMARKS**

### **A. Overview Of Claims As Amended**

The claims of the present application are directed generally to the generation or output of locally generated images in video presentations. The general differences in the claims are as follows. Independent claim 56 is directed to a method performed at a receiver with a video apparatus. In claim 56, remotely originated data and user specific data are processed in order to generate the locally generated image. Independent claim 80 is directed to a method of controlling a video presentation at a receiver station from an origination transmitter by transmitting a signal including video and an instruct signal and transmitting a control signal. Independent claim 84 is directed to a method of controlling a video presentation at a receiver station by receiving video and discrete signals at a transmitter station and transmitting the video and discrete signals to the receiver station. Independent claim 93 is directed to a method of outputting a video presentation at a receiver station. In claim 93, discrete signals are received and organized into an

organized signal. The local image is generated in response to the organized signal. New independent claim 187 is also directed to a method of outputting a video presentation at a receiver station in which discrete signals are organized into an organized signal. In claim 187, the video presentation comprising the generated image is output based on the organized signal. New claims 188-197, dependent from claim 187, correspond generally to claims 94, 95, 98, 100, 102, 103, and 106-109, which are the claims presently depending from claim 93. General amendments to the claims are described below followed by more specific descriptions of the amendments to individual claims.

Claims 56, 80, 84, and 93 have been amended generally to more clearly set forth the concept of local generation of an image. The claims are amended to set forth that the data processed to generate the local image has a specific relationship to the user at the receiver. These amendments serve to more clearly distinguish the claimed invention from images based on data that is common to multiple receivers. No new matter is added by these amendments, as this feature is found in both specifications for the reasons set forth in detail below and in the attached Declaration of Dr. George T. Ligler. The Declaration of Dr. Ligler, attached hereto as Exhibit 2, is submitted in accordance with 37 C.F.R. § 1.132.

The preambles of claims 80 and 84 are amended to set forth that the claimed method is for controlling a video presentation at a receiver station. In the Office action, it was asserted that steps set forth by these methods are incapable of performing the methods alleged by their preambles. The explicit steps of transmitting signals and video do ultimately control a video presentation as set forth by the preambles of claims 80 and 84, as amended.

Claims 61, 65, 67, 70, 71, 72, 74, 84, and 98 have been amended to exclude the limitations “programming,” “instruction,” and “processor instruction” to advance the prosecution of this application. Where appropriate, the terms “instruct signal” and “organized signal” are used consistently to refer to signals that instruct a processor to act.

The term “television program” is used to unambiguously refer to television programming. Claim 59, which included the term “processor instruction,” is cancelled.

Claims 65, 80, 81, 84, 85, and 93 have been amended to replace the term “contain” and its variants with the more conventional transitional term “include” or its appropriate variants. No new matter is added by these amendments.

Claims 110-114, 116-118, 120-127, 129, 140, 141, 162-176, 179, 181 and 182 are cancelled to expedite the prosecution of this application. Claims 64, 76, and 101, for which applicants did not claim the benefit of their November 3, 1981 priority date, have also been cancelled to expedite the prosecution of this application.

**1. Independent Claim 56 And Claims Depending Therefrom**

Claim 56 is directed to a method for presenting a video presentation including a remotely-transmitted image and a locally-generated image. The remotely-transmitted image comes from a remote video source. The locally-generated image is generated by processing remotely originated data received from a remote data source and user specific data. The remotely originated data is received based on contacting the remote data source. The user specific data is received and is specific to a user. The remotely-transmitted image and the locally-generated image are displayed simultaneously.

Specifically, claim 56 includes elements of executing processor instructions to process the remotely originated data and the user specific data in order to generate the locally generated image. The user specific data is received at the video apparatus and is specific to a user of the video apparatus. The locally generated image and the image received from a remote source are simultaneously displayed.

Claim 56 is amended to set forth user specific data in place of locally supplied data. The user specific data is set forth as being specific to a user of the video apparatus and as being received at the video apparatus.

The steps of originating and communicating a request, which were objected to in the Office action, have been deleted and replaced with the more general recitation of contacting a remote data source. Applicants note, however, that the “request” limitation is plainly disclosed in both specifications. *See, e.g.*, 1981 Specification, col. 19, ll. 37-39; 1987 Specification, p. 449, ll. 13-33.

In order to generate the locally generated image in claim 56, the remotely originated data and the user specific data are processed. Claim 56 is amended to clearly set forth that instructions are executed to process the remotely originated data and the user specific data in order to generate the locally generated image.

Finally with respect to claim 56, “an” is replaced by “a” in line 2 to correct a grammatical error.

Dependent claims 57, 89, and 90 are amended to conform to the amendments made to claim 56 from which they depend.

Dependent claim 66 is amended to more generally set forth that a processor controls the step of organizing. This amendment avoids any uncertainty regarding the precise function of any particular processor at the receiver.

Claim 73 is amended to depend from claim 56 as the further limitations of claim 73 do not rely on claim 72.

Claim 91 is amended to delete an unnecessary phrase from its preamble.

## **2. Independent Claim 80 And Claims Depending Therefrom**

Claim 80 is a transmitter claim for an “origination transmitter station” (OTS) that transmits at least one control signal and at least one instruct signal to control operations at a downstream “intermediate transmitter station” (ITS) and a further downstream receiver station. The OTS transmits a signal having video and an instruct signal that controls operations at a receiver station. The OTS also transmits a control signal that controls operations at the ITS. The control signal is operative at the ITS to control the

communication of the video and the instruct signal at the ITS. The instruct signal is operative at the receiver station to generate or output locally-generated video for display with the remotely-transmitted video at the receiver station.

Specifically, claim 80 as amended includes the step of transmitting a signal from an origination transmitter. The signal contains video and an instruct signal which is operative at the receiver station to instruct the receiver station to generate or output a locally generated portion of a video presentation based on data specific to a user of the receiver station for display coordinated with the video. Claim 80 further includes the step of transmitting a control signal from the origination transmitter, wherein the control signal is effective at the remote intermediate transmitter station to control the communication of the video and the instruct signal.

In addition to the general amendments discussed above, claim 80 is amended to set forth that the control signal controls communication of the video and the instruct signal. No new matter is added by this amendment.

Claim 81, depending from claim 80, is amended to set forth that the second control signal facilitates communication at the remote intermediate station. This amendment eliminates any confusion between the functions of the first and second control signals recited in claims 80 and 81.

Dependent claim 82 is cancelled.

### **3. Independent Claim 84 And Claims Depending Therefrom**

Claim 84 defines a method for a transmitter station to transmit a plurality of discrete signals that are organized at a receiver station into signals that have specified effects at the receiver station. In claim 84, video and two discrete signals are received and transmitted by the transmitter station. The discrete signals are for organizing into an organized signal. The organized signal is effective at the receiver station to generate or output a locally-generated image with the remotely-transmitted video. The locally-

generated image is based on user specific data. The user specific data is stored at the receiver station prior to providing the organized signal and is based on information supplied by a user of the receiver station.

Claim 84 is amended to more clearly set forth the first and second discrete signals. The first and second discrete signals include information for organizing at the receiver station into an organized signal that is operative to instruct the receiver station.

Claim 84 is amended to set forth that the organized signal instructs the receiver station to generate or output the locally generated image for display coordinated with the video. New claims 184-186 are added that depend from claim 84. Claim 184 sets forth that the organized signal instructs the receiver station to generate the locally generated image. Claim 185 sets forth that the organized signal instructs the receiver station to output the locally generated image. Claim 186 depends from claim 185 and sets forth an additional signal that is effective to enable the receiver station to respond to the organized signal.

Dependent claim 85 is amended to conform to the amendments to claim 84.

Dependent claim 86 is cancelled as certain limitations set forth therein are rendered inconsistent by or are subsumed by the amendments to claim 84.

#### **4. Independent Claim 93 And Claims Depending Therefrom**

Claim 93 is directed to a method for a receiver station to receive discrete signals that are organized into a complete instruction with a specified effect. In claim 93, the receiver station receives, detects, and passes discrete signals found in an information transmission to a processor. The receiver station organizes the first discrete signal with the second discrete signal into an organized signal. The organized signal is effective to generate an image by processing user specific subscriber data. The user specific data is stored at the receiver station prior to the organizing of the organized signal and is based on information supplied by a user of the receiver station. The result is an outputted

presentation of a video image and a coordinated display using the generated image and the video image.

Claim 93 is amended to delete the description of the video presentation in the preamble as the description is not relied upon in the body of the claim.

Claim 93 is amended to more clearly set forth the first and second discrete signals. The step of organizing is amended to more clearly set forth that an organized signal is provided as a result. Accordingly, the step of passing, which previously set forth what was comprised of the organized information is deleted. The step of generating is amended to more clearly set forth that it is in response to the organized signal. Accordingly, the separate step of responding is deleted.

Claim 93 is amended to more clearly set forth the video presentation as comprising, first, a video image and, second, a coordinated display using the generated image and the video image. The limitation directed to the generated image replacing a portion of the video image, which was objected to in the Office action, is deleted. Applicants note, however, that both disclosures support the original language. *See, e.g.*, 1981 Specification, col. 19, l. 67 - col. 20, l. 2; 1987 Specification, p. 26, ll. 4-8.

Claims 94, 106, and 109 are amended to conform to the amendments to claim 93 from which they depend.

Claim 95 is amended to expedite prosecution by deleting reference to devices that are controlled in different manners in the disclosure of applicants' invention.

Claims 96, 97, 99, 104, and 105 are cancelled as the amendments to claim 93 subsume or render inconsistent certain limitations of these dependent claims.

Claim 102 is amended in a manner similar to claim 56 to set forth contacting a remote station to obtain data.

**B. Response To The General Denial Of Applicants’  
Priority Claim**

**1. Introduction**

Despite applicants’ detailed discussion in their May 6, 2002 Response to Interview Summary (“Response to Interview Summary”) of the legal test for complying with 35 U.S.C. § 120 and the proper application of that test to the instant application, the Examiner and applicants continue to disagree regarding those issues. Some areas of disagreement stem from different views on what the law requires or what standard the law imposes, while other disagreements appear to stem from misunderstandings regarding the respective positions on the issues. In the following sections applicants respond to the issues raised by the Examiner generally in the order they appear in Section I of the Office action.

**2. Restatement Of Applicants’ Position On The  
Legal Requirements Of § 120**

The test to determine whether a claim is entitled to the benefit of an earlier filing date under 35 U.S.C. § 120 is straightforward. The proper legal standard for satisfying § 120, as articulated on many occasions by the Federal Circuit, is that the claimed invention must be described in the parent application<sup>1</sup> in a manner that satisfies the terms of § 112:

A claim in a CIP [continuation-in-part] application is entitled to the filing date of the parent application when the claimed invention is described in the parent specification in a manner that satisfies, *inter alia*, the description requirement of 35 U.S.C. § 112.

*Therma-Tru Corp. v. Peachtree Doors Inc.*, 44 F.3d 988, 992, 33 USPQ2d 1274, 1276 (Fed. Cir. 1995). The crucial issue for determining if a claim is entitled to the filing date

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<sup>1</sup> While the case law addressing priority focuses on demonstrating written description support in the parent application, applicants acknowledge that the claims must also be supported under § 112 by the instant specification.



of an earlier application is whether the earlier application shows that the inventor was in possession of the claimed invention as of the date sought under § 120.

To qualify for an earlier filing date, section 120 requires, *inter alia*, that the earlier-filed U.S. patent application contain a disclosure which complies with 35 U.S.C. § 112, ¶1 (1994) for each claim in the newly filed application. Thus, this benefit only applies to claims that recite subject matter *adequately* described in an earlier application, and does not extend to claims with subject matter outside the description in the earlier application. In other words, a claim complies with 35 U.S.C. § 120 and acquires an earlier filing date *if, and only if, it could have been added to an earlier application without introducing new matter.*

*Studiengesellschaft Kohle, m.b.H. v. Shell Oil Co.*, 112 F.3d 1561, 1564, 42 USPQ2d 1674, 1677 (Fed. Cir. 1997) (citations omitted; emphasis added); *see also Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1571-72, 41 USPQ2d 1961, 1966 (Fed. Cir. 1997) (the earlier application “must describe [the claimed] invention, and do so in sufficient detail that one skilled in the art can clearly conclude that the inventor invented the claimed invention as of the filing date sought”); *Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1562, 19 USPQ2d 1111, 1115-16 (Fed. Cir. 1991) (“satisfaction of the description requirement insures that subject matter presented in the form of a claim subsequent to the filing date of the application was sufficiently disclosed at the time of filing so that the prima facie date of invention can fairly be held to be the filing date of the application.”) (citation omitted).

Numerous cases further hold that compliance with § 120 allows for a parent and later filed CIP application to describe and support the claimed invention in *different* ways. Differences between what is disclosed and claimed in the two applications are simply not relevant to satisfying § 120, as long as what is being *claimed* in the CIP application is supported under § 112 by the parent application and the later application. There is ample support for applicants’ position:

In order to determine whether a prior application meets the “written description” requirement with respect to later-filed claims, the prior application need not describe the claimed subject matter in exactly the same terms as used in the claims; it must simply indicate to persons skilled in the art that as of the earlier date the applicant had invented what is now claimed.

*See Eiselstein v. Frank*, 52 F.3d 1035, 1038, 34 USPQ2d 1467, 1470 (Fed. Cir. 1995);

[T]he earlier and later applications need not use identical words, if the earlier application shows the subject matter that is claimed in the later application, with adequate direction as to how to obtain it. . . .

. . . .

. . . [A]n invention may be described in many different ways and still be the same invention. In *In re Kirchner*, 305 F.2d 897, 904, 134 USPQ 324, 330 (C.C.P.A. 1962), the court held that compliance with section 120 “does not require that the invention be described in the same way, or comply with section 112 in the same way, in both applications.”

*Kennecott Corp. v. Kyocera Int’l, Inc.*, 835 F.2d 1419, 1422, 5 USPQ2d 1194, 1197 (Fed. Cir. 1987);

[I]t is evident that the salutary provision in the statute which confers the benefit of an earlier filing date is not dependant on that which may be gleaned from the claims or specification to be the subject matter regarded by the applicants as their invention in the earlier application. It turns on whether the *disclosure* requirements of the first paragraph of § 112 are met with respect to the subject matter *now* claimed.

*Martin v. Johnson*, 454 F.2d 746, 750, 172 USPQ2d 391, 394 (C.C.P.A. 1972);

[In *In re Brower*, 433 F.2d 813 (C.C.P.A. 1970)] we pointed out that 35 U.S.C. § 120 specifies only that the previously filed application must disclose the invention “in the manner provided by the first paragraph of section 112,” and made it clear that there is no requirement under section 120 that the invention claimed in the subsequent application must correspond to what was regarded as the invention in the earlier application.

*In re Ahlbrecht*, 435 F.2d 908, 909, 168 USPQ 293, 294-95 (C.C.P.A. 1971).

In *In re Kirchner*, 305 F.2d 897, 134 USPQ 324 (C.C.P.A. 1962), the Court addressed a factual scenario similar to the instant application. In an opinion by Judge Rich, the Court concluded that the applicant was entitled to the priority date of the parent application even though the two disclosures were different. At the end of its decision the Court described the requirements of § 120:

Assuming the common inventorship, copendency, and cross-reference required by section 120, that section further requires only that the invention be disclosed in the parent application in such manner as to comply with the first paragraph of section 112 and be the same invention as that disclosed in the later application. It does not require that the invention be described in the same way, or comply with section 112 in the same way, in both applications.

*Kirchner*, 305 F.2d at 904, 134 USPQ at 330. While the *Kirchner* case focused on the different utilities being disclosed in the two applications for the same claimed invention, the *Kennecott* decision makes it clear that the claimed invention itself can be described differently in the earlier and later filed applications and still obtain the benefit of the earlier filing date. See *Kennecott*, 835 F.2d at 1422, 5 USPQ2d at 1197.

The case of *Martin v. Johnson*, 454 F.2d 746, 172 USPQ 391, addressed a situation in which an applicant had disclosed an invention in different ways in the parent and later filed applications. In that case, Johnson sought the benefit of the priority date of his parent application in an interference proceeding. The Court held that Johnson was entitled to the priority date of the parent application despite Martin's contention that the invention disclosed in Johnson's parent application was different from the invention disclosed and claimed in his CIP application. *Id.* at 748, 172 USPQ at 393. In response to Martin's assertion that "the only thing carried forward through the line of cases asserted by Johnson is the mere name of the compound of the count," the Court concluded:

From the standpoint of the description requirement, the omission of the structural formula from the Johnson application is of no consequence.

The fact remains that the compound described is the same, and the description need not be in *ipsis verbis* to be sufficient. The fact that the effective amount of the compound may be different in the several [Johnson] applications is irrelevant. The [claim at issue in the interference] count is not directed to the method of using the herbicide where the effective amount might be a factor; it is drawn instead to the compound itself, and effective quantity is not an element.

*Johnson*, 454 F.2d at 751, 172 USPQ at 395 (internal citations omitted). As the *Johnson* decision makes clear, in performing the §§ 112 and 120 analysis, the focus must be on precisely what is being *claimed* in the CIP application. Differences between the disclosures in the parent and CIP applications are not relevant to the priority analysis as long as what is being relied on by the applicant provides sufficient support for the claim. Johnson's applications, for example, disclosed different mixtures of herbicidal compounds in which the effective amounts of the total herbicide and the effective amounts of the claimed compound varied with respect to the parent and CIP applications. Because the claim at issue in the interference count was directed to only the compound and because the claimed compound was disclosed in each of the different mixtures disclosed in the parent and CIP applications, the claim was entitled to priority under § 120.

Similar reasoning was applied in an analogous case addressing the issue of whether a claimed invention was reduced to practice. In *In re Dardick*, 496 F.2d 1234, 181 USPQ 834 (C.C.P.A. 1974) the issue was whether the applicant could swear behind a reference by showing that the claimed invention was reduced to practice prior to the date of the reference. To demonstrate reduction to practice, the applicant submitted evidence under Rule 131 that a particular embodiment of the claimed invention was reduced to practice and tested. The Examiner, however, objected to the evidence of reduction to

practice on the grounds that the reduction of practice was “‘of an embodiment of an invention not disclosed in the application.’” *Id.* at 1239-40, 181 USPQ at 838. However, the Court held that there is “no legal requirement that the embodiment of an invention relied upon as a reduction of practice must be identical to that described in the application.” *Id.* In other words, undisclosed embodiments could be used to demonstrate reduction to practice as long as they show reduction to practice of what was being claimed—differences that did not relate to what was being claimed are irrelevant.

Because the case law clearly allows for an applicant to describe an invention differently in earlier and later filed applications and still obtain the benefit of the earlier filing date, it is not surprising that applicants have found no cases addressing compliance with § 120 which suggest that the two disclosures identified to support a claim should or need be compared for similarity. Instead, as discussed, the case law establishes that such a comparison is unnecessary and indeed improper. *See, e.g., Johnson*, 454 F.2d at 750, 172 USPQ2d at 394.

The test for satisfying § 112 in the priority context as set forth above does not deviate from the written description test under § 112 applied when § 120 is not invoked. In *All Dental Prodx, LLC v. Advantage Dental Prods., Inc.*, 309 F.3d 774, 64 USPQ2d 1945 (Fed. Cir. 2002), a case that did not involve § 120, the Court cited the proposition from *Eiselstein* that an application need not use the same terms as found in the claims to comply with § 112. The issue in *All Dental* was whether or not the claim term “original undefined mass” was supported under § 112 in the specification. The Court concluded that the term was supported by the specification even though the specification did not use that term. “[T]he failure of the specification to specifically mention a limitation that later appears in the claims is not a fatal one when one skilled in the art would recognize upon reading the specification that the new language reflects what the specification shows had been invented.” *All Dental*, 309 F.3d at 779, 64 USPQ2d at 1948; *see also In re Kaslow*, 707 F.2d 1366, 1375, 217 USPQ 1089, 1096 (Fed. Cir. 1983) (“The test for determining

compliance with the written description requirement is whether the disclosure of the application as originally filed reasonably conveys to the artisan that the inventor had possession at that time of the later claimed subject matter, rather than the presence or absence of literal support in the specification for the claim language.”); *Fujikawa v. Wattanasin*, 93 F.3d 1559, 1570, 39 USPQ2d 1895, 1904 (Fed. Cir. 1996) (“the disclosure need only reasonably convey to persons skilled in the art that the inventor had possession of the subject matter in question”). As applicants have consistently argued to the Examiner, upon reading the 1981 and 1987 specifications, one skilled in the art would recognize that the inventions claimed in the instant application reflect what was shown to have been invented in 1981. This is now confirmed by the accompanying Declaration of Dr. Ligler.

Section 120 imposes no requirement that a parent and a later filed application use identical or even similar disclosures to describe the claimed invention. The case law is clear that the relevant requirement under § 120 is that the subject matter actually being claimed in the later-filed application comply with the requirements of § 112, first paragraph. Accordingly, the starting point for any analysis under § 120 is what is currently being claimed, and the Examiner’s repetitious arguments focusing on comparing applicants’ two disclosures at an abstract level, without reference to specific claims or claim limitations, is unnecessary and improper.

### **3. Response To The Various Unsupported “Theories” Relied On By The Examiner For Denying Priority Under § 120**

The Examiner has steadfastly refused to accept applicants’ 1981 priority claim with respect to all pending claims in this application. But in denying the 1981 priority claim, the Examiner has failed to conduct the proper claim-by-claim analysis required under the controlling authorities set forth above. Instead, the Examiner has denied the priority claim based on a general comparison of the specifications to one another. This is

plainly improper. *See Eiselstein*, 52 F.3d at 1038, 34 USPQ2d at 1470; *Kennecott Corp.*, 835 F.2d at 1422, 5 USPQ2d at 1197; *In re Ahlbrecht*, 435 F.2d at 909, 168 USPQ at 294-95. At times, the generalized denial of applicants' priority claim appears to be based on the notion that, because different words and phrases may be used to describe the claimed subject matter in the 1981 and 1987 specifications, the claims cannot be supported by both specifications. This basis, of course, flies in the face of several controlling Federal Circuit cases that clearly hold that *ipsis verbis* support is not required. *See Eiselstein*, 52 F.3d at 1038, 34 USPQ2d at 1470; *Kennecott Corp.*, 835 F.2d at 1422, 5 USPQ2d at 1197. At other times, the generalized denial appears to be based on the idea that the new subject matter included in the 1987 specification somehow causes the claimed "basic" subject matter to be nonexistent in the 1987 specification or somehow changed in character such that it cannot be relied upon to support claims. The accompanying Declaration of Dr. Ligler demonstrates that this is not the case.

Not surprisingly, the Examiner has provided *no legal authority* to support his outright denial of applicants' priority claim based on a general comparison of the 1981 and 1987 disclosures. Applicants believe that no such authority can be found. So instead, the Examiner has offered new "theories" to support the complete denial of applicants' priority claim. These "theories" include the "wiggle room" theory, the "pledge" theory, the "smudge" theory, and the "metes and bounds" theory. Again, no *legal authority* is offered in support of these "theories." For this reason alone, applicants submit that all discussion of these "theories," and any rejections or objections based thereon, should be withdrawn. If the Examiner chooses to include these "theories" in the next Office action, applicants respectfully request that the Examiner provide citations to controlling legal authority that justifies these "theories." Notwithstanding the foregoing, applicants respond below to the "merits" (to the extent any can be discerned) of the "theories."

**a. The “Wiggle Room” Theory**

In Section I (C) of the Office action the Examiner introduces the “wiggle room” theory. In attempting to explain this theory, the Examiner presents a hypothetical in which a potential infringer is faced with the task of interpreting applicants’ pending claims, first, if such claims were to issue from the 1981 specification, and second, if such claims were to issue from the 1987 specification. Applicants are aware of no authority supporting the Examiner’s analysis which speculates on how a potential infringer would interpret claims pending during prosecution. The perspective of a potential infringer and how the Examiner thinks a hypothetical potential infringer would interpret, understand, or feel about claims pending during prosecution is irrelevant, unsupported by the law, and not a proper basis for a denial of priority under § 120. Claims that are properly supported by both specifications are entitled to the 1981 priority date. It is simply not relevant to the § 112 and § 120 analysis whether or not a potential infringer using, as the Examiner describes “an enhanced system,” would infringe the pending claims.

Applicants note that the Examiner’s apparent argument in his application of the “wiggle room” theory—that applicants claim of priority should be rejected because of alleged problems or issues that a potential infringer would encounter if applicants’ claims were granted the earlier priority date—is not a proper basis to deny applicants’ claims the priority date under § 120. There is no legal basis whatsoever that support such an argument. Further, applicants note that potential infringers could face the very situation described by the Examiner with respect to claims that issue from *any* CIP application containing new matter, regardless of the manner by which the parent application’s subject matter is disclosed in the CIP application. For example, if a basic invention is disclosed in a parent application, and a CIP application incorporates the parent application by reference and also discloses a new embodiment of the basic invention as new matter, a potential infringer analyzing claims issuing from the CIP application faces the very same issues of claim interpretation as described by the Examiner. Specifically, any ambiguity



as to whether CIP claims directed to the basic invention cover the new embodiment becomes less ambiguous by virtue of the disclosure of the new embodiment in the CIP application. This is true *regardless* of the manner by which the parent application's subject matter appears in the CIP (i.e., through incorporation by reference, in full text format, or otherwise). This flaw in the Examiner's "wiggle room" theory is in part the result of the erroneous assumption that an applicants' specification or specifications are determinative of the scope of a given claim.<sup>2</sup> In short, the Examiner's "wiggle room" theory concerning how a potential infringer might view applicants' claims is incorrect, improper, and irrelevant.

**b. The "Pledge" Theory**

In Section I (H) the Examiner asserts that "by claiming the benefit of section 120 priority for a given claim filed in a subsequently filed CIP application, an applicant is essentially '*pledging*' (e.g. putting everyone on notice) that the claim is directed 'solely' to the subject matter that is found within the specification of the Parent application, and not to any of the 'new subject matter' that has been introduced via the subsequently filed CIP." Office action, p. 13. Contrary to the Examiner's position, an applicant's decision to assert an earlier priority date under § 120 *does not* necessarily limit the scope of the claim in this manner. Instead, an applicant's decision to assert priority under § 120 simply demands that a particular claim be supported in both the earlier and later specifications. The scope of the claim is determined under the legal principles applicable to claim interpretation. For example, if a parent application discloses a genus and the CIP discloses the genus and several new species, a claim issuing on the CIP application which claims the genus may be broad enough to cover the new species and be entitled to

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<sup>2</sup> This issue is raised several times in the Office action. Applicants further address the Examiner's erroneous contention that the scope of applicants claims is "necessarily" limited by the disclosure relied upon to support a particular claim below in their response to the Examiner's "pledge" and "metes and bounds" theories.

the benefit of the parent application's filing date, even though the species are first disclosed in the CIP. Of course, the content of both specifications may be relevant to the claim interpretation analysis; but there is no *per se* rule regarding the limits or bounds of a particular claim based on an applicant's claim to priority under § 120. There is simply no legal basis for the Examiner's position that by asserting priority to the 1981 specification, applicants have "pledged" that the *scope* of their claims is limited to what was disclosed in the 1981 specification and not to what is disclosed in the later application.

**c. The "Smudge" Theory**

In Section I (H) of the Office action, the Examiner asks "why should a pending claim having limitations that are directed to even a smudge of new 1987 subject matter be entitled to the earlier 1981 filing date of the Parent specification which did not disclose that smudge of new subject matter?" Office action, p. 14. Applicants are not entirely clear what point the Examiner is trying to make with this "smudge" theory. To the extent the smudge theory stands for the proposition that applicants' priority claim may be denied due to applicants' use of certain words or phrases in the 1987 specification that do not appear verbatim in the 1981 specification, the Examiner's "smudge" theory directly contradicts established legal authority which plainly holds that "earlier and later applications need not use the identical words" to describe the invention because "an invention may be described in different ways and still be the same invention." *Kennecott Corp.*, 835 F.2d at 1422, 5 USPQ2d at 1197. Accordingly, applicants are justified in citing to passages from the 1987 specification that may also include discussions of enhancements and improvements that are not described in the 1981 specification. Applicants cite such passages from the 1987 specification because those passages also disclose the subject matter disclosed in the 1981 specification that is currently being claimed. This is further evidenced by the Declaration of Dr. Ligler.

As best applicants can ascertain, the Examiner relies on the “smudge” theory to penalize applicants for disclosing the subject matter from the 1981 specification in the 1987 specification in an integrated fashion with the new enhancements and improvements. The “smudge” theory ignores the fact that the subject matter disclosed in the 1981 specification also appears in passages relied upon by applicants from the 1987 specification—even if the same words and phrases are not always used to describe the same subject matter. The Examiner’s application of the smudge theory is tantamount to requiring applicants to point to *identical* support for a given claim, which is directly contradicted by the relevant legal authorities.

**d. The “Specification Defines The Metes And Bounds” Theory**

On page 35 of the Office action the Examiner states his understanding that the “currently pending claims must be ‘directed’ to ‘subject matter’ that was described in applicant’s 1987 CIP specification whereby the ‘subject matter’ that is described in the specification effectively defines the metes and bounds of the claims’ limitations that are directed to it (e.g. the broadest reasonable interpretation that can be given to a claim.)” Office action, p. 35. Applicants do not fully understand this sentence.<sup>3</sup> However, it appears that the Examiner asserts that the subject matter relied upon by an applicant to support a given claim defines the metes and bounds, or scope, of a given claim. As more fully set forth in their Response to Interview Summary, the Examiner’s “metes and bounds” theory is unsupportable and contrary to established legal authority. In contrast to the Examiner’s use of the phrase “metes and bounds,” many patent cases hold that a patent’s *claims* define the metes and bounds, or scope, of the patent grant. Often, cases use the “metes and bounds” expression to stress that it is the patent claims, rather than

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<sup>3</sup> As with the other “theories” addressed in this Section, applicants have not found any legal authority that sheds any light on the “metes and bounds” theory, nor has the Examiner cited any authority.

what is disclosed in the specification, that defines the scope of the invention. See *Corning Glass Works v. Sumitomo Elec. U.S.A., Inc.*, 868 F.2d 1251, 1257, 9 USPQ2d 1962, 1966-67 (Fed. Cir. 1989) (“A claim in a patent provides the metes and bounds of the right which the patent confers on the patentee to exclude others from making, using, or selling the protected invention.”).

Interestingly, the parenthetical from the Examiner’s quote identified above (“the broadest reasonable interpretation that can be given to a claim”) appears to contradict the very proposition suggested by the Examiner’s metes and bounds theory. As applicants have previously stated, the M.P.E.P. instructs Examiners that “pending claims must be ‘given their broadest reasonable interpretation consistent with the specification.’” M.P.E.P. § 2111 (8<sup>th</sup> ed. 2001); see also *In re Bass*, -F.3d-, No. 02-1046, 2002 WL 31818303 (Fed. Cir. Dec. 17, 2002). The Examiner appears to interpret this M.P.E.P. instruction as saying that claims must be given their broadest reasonable interpretation *limited* to what is directed in the specification. But, of course, the M.P.E.P. does not say this, and neither do the controlling Federal Circuit cases. Thus, the M.P.E.P. and the Examiner’s own parenthetical contradict the Examiner’s position that a claim is defined by, and therefore limited to, what is disclosed in the specification.

Contrary to the Examiner’s position, claims should not be limited to the embodiments disclosed in the specification. See, e.g., *Burke, Inc. v. Bruno Indep. Living Aids, Inc.*, 183 F.3d 1334, 1340, 51 USPQ2d 1295, 1299 (Fed. Cir. 1999) (“Consistent with the principle that the patented invention is defined by the claims, we have often held that limitations cannot be read into the claims from the specification or the prosecution history.”); *Intervet Am., Inc. v. Kee-Vet Labs., Inc.*, 887 F.2d 1050, 1053, 12 USPQ2d 1474, 1476 (Fed. Cir. 1989) (“[T]his court has consistently adhered to the proposition that courts cannot alter what the patentee has chosen to claim as his invention, that limitations appearing in the specification will not be read into claims, and that interpreting what is *meant* by a word *in* a claim ‘is not to be confused with adding an

extraneous limitation appearing in the specification, which is improper.”) (citation omitted).

The Examiner’s “metes and bounds” theory is contrary to established principles governing the interpretation of patent claims. The Examiner’s duty is to give the claims their broadest reasonable interpretation consistent with the specification. Limiting the claims to embodiments disclosed in the specification is improper when examining claims (or in any other context). When properly interpreted, it is clear that applicants’ claims are supported by both specifications as demonstrated, e.g., by the Declaration of Dr. Ligler.

**e. Conclusion Regarding The Examiner’s “Theories”**

In summary, the Examiner’s novel “theories” are improper, unsupportable and contrary to established legal precedent. The absence of any citations by the Examiner in support of these “theories” is particularly telling. The few cases the Examiner does cite to in the Office action actually support applicants’ view of the proper legal test under §§ 112 and 120. For example, in Section I (M) of the Office action, the Examiner cites the following additional passage from the *Kirchner* decision (a case upon which applicants rely to demonstrate the proper test under §§ 112 and 120):

And to determine what is the invention under consideration, one must be governed by the claims of the later application, because it is there one must look to determine what invention the “application for patent” referred to in the opening words of section 120 is for

Office action, p. 20 (quoting *Kirchner*). The quote identified by the Examiner simply reinforces applicants’ position that in performing an analysis regarding whether or not the requirements of § 120 is satisfied, the starting point is the invention (i.e., the pending claims) in the CIP application. Similarly, the following quotation from the *Transco* decision relied on by the Examiner also stresses that the relevant inquiry is what is recited in the pending claims:

However, if a claim in a continuation-in-part application *recites* a feature which was not disclosed or adequately supported by a proper disclosure under section 112 in the parent application, but was introduced first or adequately supported in the continuation-in-part application such a claim is entitled only to the filing date of the continuation-in-part application.

Office action, p. 31 (emphasis added) (quoting *Transco Prods., Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 558, 32 USPQ2d 1077, 1082 (Fed. Cir. 1994)).

Applicants fully agree with this quotation. The important point is that applicants' claims do *not recite* features which were first or only disclosed and described in the 1987 specification. The claimed features of the instant application are in fact described in both specifications.

Accordingly, applicants respectfully request that all discussion of the “theories,” and any objections or rejections based thereon, be promptly withdrawn. Applicants further respectfully request a proper claim-by-claim analysis of the §§ 112 and 120 issues in view of the evidence presented by applicants—particularly the Declaration of Dr. Ligler. Applicants submit that this evidence plainly shows that both specifications describe the subject matter claimed in this application in the manner required by § 112, first paragraph, and that therefore, applicants' priority claim under § 120 is proper.

**4. Response To Specific Issues Raised In Section I  
Of The Office Action**

**a. The Extent To Which Subject Matter  
From The 1981 Specification Appears In  
The 1987 Specification**

In Section I (A) of the Office action, the Examiner again questions the extent to which the subject matter of applicants' 1981 specification was “carried forward” into applicants' 1987 specification. The Examiner argues that it is “impossible” to determine if any portion of the 1981 specification was “carried forward” into applicants' 1987 specification. The Examiner then asserts that “for this reason alone” applicants are not

entitled to a 1981 priority date for any of the pending claims. As is often the case, the Examiner's position is not supported by any controlling legal authority. In the analysis of whether or not applicants are entitled to their 1981 priority date, the law does not require the Examiner to *first* determine what subject matter was carried forward from the 1981 specification into the 1987 specification. To determine if applicants are entitled to their 1981 priority date *with respect to a particular claim*, the Examiner must simply determine if *a particular claim* is supported under § 112, first paragraph, by each specification. Finally, regarding the Examiner's discussion of the "incorporation by reference" issue in Section I (F), applicants continue to maintain that it is unnecessary to incorporate by reference. No authority to the contrary has ever been provided by the Examiner. It is therefore improper for the Examiner to attempt to penalize applicants for incorporating their 1981 subject matter into the 1987 specification in an integrated fashion.

Further, contrary to the Examiner's assertions, applicants have, on numerous occasions in this application and in related pending applications, demonstrated that the features disclosed in the 1981 specification are also disclosed in the 1987 specification.

In response, the Examiner asserts generally that:

only the "enhanced and improved" 1987 versions of the 1981 inventions actually exist within the instant 1987 CIP specification . . . (Office action, p. 6);

the "unmodified and unenhanced" 1981 subject matter described in the past 1981 Parent disclosure simply does not exist within the instant 1987 CIP disclosure . . . (Office action, p. 8);

the "1981 inventions" from the 1981 specification were left behind at the time of the of filing the instant 1987 CIP specification in favor of the enhanced/improved/modified "1987 inventions" . . . (Office action, p. 10, n. 5);

the 1987 subject matter of applicant's instant 1987 CIP specification is "inconsistent" with the 1981 subject matter of applicant's past parent specification because the 1987 CIP specification has introduced 1987 "enhancements and

improvements” which effect [sic] the scope and meaning of everything that is disclosed in the 1987 CIP specification.  
(Office action, p. 36.)

These conclusory statements on this issue are supported with few examples. The few examples that the Examiner does provide (concerning what the Examiner alleges in Section I(V) of the Office action to be “inconsistencies” between the two specifications, which are addressed below by applicants) cannot and do not support the sweeping and unqualified statements cited above. The biggest problem, however, is that the Examiner steadfastly refuses to conduct the proper claim-by-claim analysis when addressing the §§ 112 and 120 issues. Instead, the Examiner relies on generalizations and a few examples that are (a) incorrect and (b) *not tied to any particular claim*. This is improper.

Finally, the Examiner misrepresents applicants’ clear statement on this issue when he asserts that “applicant now acknowledges that the 1981 application was not incorporated into the 1987 application.” Office action, p. 54. What applicants actually stated in their last Response was that the 1981 application “was not incorporated *by reference*” into the 1987 application. Applicants have at all times maintained that the subject matter from the 1981 specification is disclosed in the 1987 specification.

**b. The Mischaracterization And Misquoting  
Of The ITC Decision**

In the discussion of the relationship between applicants’ two specifications, the Office action quotes several passages from a decision issued in prior litigation pending before the International Trade Commission (“ITC”) involving one of applicants’ issued patents. In the discussion of the ITC decision, the Office action misquotes the published decision and neglects to present the various passages in their proper procedural and factual contexts. Due to numerous inaccuracies surrounding the ITC quotations, the entire discussion of this issue in the Office action is confusing and misleading. Placed in an accurate and proper context, the record from the ITC litigation actually supports applicants’ position on the written description and priority issues.



Before addressing the specific passages quoted in the Office action, applicants must first provide a procedural overview of the ITC litigation. In the litigation before the ITC, the owner of applicants' issued patents and the assignee of the instant application, Personalized Media Communications L.L.C. (PMC), alleged that certain products imported into the United States infringed several claims of U.S. Patent No. 5,225,277. Following an evidentiary hearing, the ITC administrative law judge, Judge Luckern, issued a decision entitled "Initial and Recommended Determinations" (Initial Determinations) on October 20, 1997. *See In re Certain Digital Satellite Sys. (DSS) Receivers & Components Thereof*, No. 337-TA-392, 1997 WL 696255 (Int'l Trade Comm'n Oct. 20, 1997). In connection with the evidentiary hearing, three separate groups submitted briefs and arguments to Judge Luckern: 1) PMC; 2) the accused infringers (Respondents); and 3) the ITC Staff. Judge Luckern's Initial Determinations made various findings and concluded that: 1) claims 3, 6, 7, 12, 15, 35, and 44 were invalid as indefinite; 2) claims 3, 6, 7, 12, 15, 35, and 44 were invalid as not enabled; 3) claim 7 was invalid as anticipated; and 4) no asserted claim was infringed. Significantly, the Respondents challenged only one claim, claim 44, for lack of written description support. Judge Luckern found that claim 44 was *not invalid* under § 112, first paragraph, for a failure to provide proper written description support. *Thus no claim asserted in the ITC litigation was held invalid by Judge Luckern under 35 U.S.C. § 112, first paragraph, for failure to provide adequate written description support.*

On December 4, 1997, the ITC issued its Final Determination which adopted some, but not all, of Judge Luckern's Initial Determinations. Specifically, the ITC's Final Determination adopted Judge Luckern's claim constructions and findings that the asserted claims were indefinite and not infringed. On the other hand, the ITC did not adopt Judge Luckern's other findings concerning, for example, whether the claims were enabled or whether claim 7 was anticipated. On appeal before the Federal Circuit were only those findings by Judge Luckern that the ITC expressly adopted in its Final

Determination. The Federal Circuit's opinion: 1) reversed Judge Luckern's and the ITC's determination that the asserted patents claims were invalid for indefiniteness; 2) vacated Judge Luckern's and the ITC's determination that asserted claim 7 was not infringed; and 3) affirmed Judge Luckern's and the ITC's determination that claims 6 and 44 were not infringed. *See Personalized Media Communications, LLC v. Int'l Trade Comm'n*, 161 F.3d 696, 48 USPQ2d 1880 (Fed. Cir. 1998). As a result of the Federal Circuit opinion, the case was remanded to the ITC. After the case was remanded to the ITC, PMC withdrew its complaint and the ITC vacated Judge Luckern's Initial Determination with respect to the findings of invalidity for anticipation and lack of enablement. *See In re Certain Digital Satellite Sys. (DSS) Receivers & Components Thereof*, No. 337-TA-392, 2001 WL 535427 (Int'l Trade Comm'n May 13, 1999). Accordingly, the quotes relied upon by the Examiner in the Office action, all of which are from Judge Luckern's discussion of invalidity for lack of enablement, were vacated by the ITC.

The Office action fails to provide any substantive and procedural context for the various citations to Judge Luckern's Initial Determinations. For example, it fails to indicate that during the course of the ITC litigation *not one of the asserted claims was found to be invalid for failure to satisfy the written description requirement of § 112, first paragraph*. Second, it fails to mention that the ITC refused to adopt Judge Luckern's findings of invalidity based on enablement and, therefore, those findings were not reviewed by the Federal Circuit. Third, it does not point out that the Federal Circuit reversed all of Judge Luckern's and the ITC's conclusions that the asserted claims were invalid for indefiniteness under § 112, second paragraph. Finally, it fails to indicate that Judge Luckern's findings on the enablement issue—where all of the Examiner's quotes originally appeared—were vacated by the ITC and have no legal effect whatsoever.

Even more disturbing is the Office action's misleading statements with respect to certain quotations. The first quote introduced in the Office action on this point is the following:

To the extent -- and I'm unaware of any significant differences between the '490 patent [the 44 pages of applicant's past 1981 Parent specification] and the '277 patent [the 557 pages of applicant's instant 1987 CIP specification]. I haven't seen one, and I don't remember it. Certainly, I made an effort early on to determine whether or not the disclosures of the '490 patent made their way into the '277 and although they're spread around and sometimes stated a little bit differently, for all relevant purposes of this hearing, the '490 patent is expanded by the '277. It's certainly not inconsistent.

Office action, p. 2. This quote is mischaracterized in the Office action as "testimony" of applicants' counsel before the ITC. This quote appears to be cited for the purpose of supporting the Examiner's unfounded argument that "no conscious effort to carry the '1981 subject matter' forward into the instant 1987 CIP specification ever appears to have been made..." Office action, p. 2. Using the above quote, the Office action appears to insinuate that if the lawyer responsible for preparing the 1987 application had to go back and review it to determine if the 1981 disclosure was included, then the 1981 disclosure must not be included in the 1987 application. This is grossly misleading.

First, this passage cited by the Examiner is not "testimony" before the ITC—it is an attorney's argument made by PMC's litigation counsel during closing arguments. Further, the attorney making the statement, Robert Taylor, has never represented applicants in connection with the preparation or prosecution of any of their patent applications. Because the attorney representing PMC in the litigation was not directly involved in prosecuting any of PMC's applications, it is not surprising that he would have to review the two specifications to determine how the 1981 specification was incorporated into the 1987 specification in connection with his representation of PMC as litigation counsel. The fact that PMC's litigation counsel undertook such an effort, and

concluded that the '490 patent is simply expanded by the '277 patent, is consistent with applicants' position, namely, that the subject matter from the 1981 specification is indeed included in the 1987 specification.

Regarding the second quote from Judge Luckern's Initial Determination discussing the length of the 1987 specification (appearing on page 3 of the Office action), applicants submit that Judge Luckern's observation that the 1987 specification is longer and contains additional material compared to the 1981 specification is of no consequence. The third quote from the Initial Determination is misquoted in the Office action. The correct quote, in which Judge Luckern comments on applicants' specifications, is identified below with the portion added by the Examiner in bold and in brackets:

the disclosure in the 24 columns of the '490 patent [the 44 pages of the past 1981 parent specification], if indeed it is **[at]** all carried forward, is interspersed among some 328 columns of the '277 patent [the 557 pages of the instant 1987 CIP specification]

Office action, p. 3. The inaccurate version of this quote misleads the reader into thinking that the author questioned whether *any* of the parent specification was carried forward. The accurate version of the quote makes it clear that at most, Judge Luckern questioned whether *all of* the parent specification was carried forward. In any event, Judge Luckern did not find that any of PMC's claims were invalid for failure to satisfy the written description requirement of § 112, and the other findings on the enablement issue which Judge Luckern was discussing were vacated.

Later in the Office action, the Office action again quotes the Initial Determinations out of context. The passage quoted on page 42 of the Office action is not Judge Luckern's opinion, but rather, the argument is one that was advanced in the brief submitted by the ITC Staff. The Examiner's citation to this passage in Judge Luckern's Initial Determinations fails to attribute the passage as being a quote from the ITC Staff's brief filed in the litigation. Further, the quote does not at all support the Examiner's

position. The Examiner contends that applicants had clearly argued in the ITC litigation that “the 1987 ‘SPAM’ transport scheme was not disclosed within applicant’s 1981 parent application.” Contrary to the Examiner’s assertion, the ITC Staff’s brief indicated that PMC had simply noted its brief that the acronym “SPAM” was first introduced in the 1987 specification.

When the various citations to the Initial Determinations are presented accurately and in their proper substantive and procedural context, the citations do not support the Examiner’s position. Indeed, the ITC record is consistent with applicants’ position on the written description issue. The statements made by PMC’s counsel are also consistent with applicants’ position on the priority issue, and the other quotations are nothing more than dicta concerning a finding by Judge Luckern that was later vacated. Even if these findings had not been vacated, the observations by Judge Luckern do not contradict applicants’ position that the pending claims are entitled to the 1981 priority date under § 120.

**c. Common Subject Matter vs. Different Subject Matter**

Applicants’ addressed the Examiner’s arguments related to the “common subject matter” issue in detail in their Response to Interview Summary. The disagreement on the “common subject matter” issue appears to stem from the different tests applied by the Examiner and applicants to determine what constitutes common subject matter. As best understood by applicants, the Examiner asserts that common subject matter only exists when each specification’s disclosure “perfectly circumscribes” the same subject matter. In contrast, applicants assert that common subject matter exists if the relied upon disclosures from each specification both support the claim for which priority is asserted. As applicants have previously stated, there is no legal authority supporting the Examiner’s denial of applicants’ priority claim based on a comparison of the specifications without regard to a specific claim. In contrast to the Examiner’s test for

common subject matter which would reject applicants' claim of priority without ever referring to a particular claim, applicants' test only can be performed in the context of a particular pending claim.

Similarly, the Examiner's dispute with respect to applicants' position that the written description support relied upon to support a given claim need not be identical (*i.e.*, different words and phrases can be used to support a given claim and satisfy § 120) is unwarranted. The Examiner's position directly contradicts the Federal Circuit's holding that "section 120 'does not require that the invention be described in the same way, or comply with section 112 in the same way, in both applications.'" *Kennecott*, 835 F.2d at 1422, 5 USPQ2d at 1197 (citation omitted). In fact, applicants are aware of no legal authority supporting the Examiner's position that the support relied upon by an applicant under § 120 must be compared to determine if it "perfectly circumscribes" the same subject matter. Under § 120, the relied upon support must satisfy the written description requirement of § 112 for the claim at issue, and if written description support exists in both specifications, there is common subject matter. It simply does not matter if the words and phrases are different, or if the support provided from the 1987 disclosure includes references to the enhancements and improvements (so long as what is being claimed is supported).

In Section I (M) the Examiner challenges applicants' interpretation of the *In re Kirchner* decision. The facts of the *Kirchner* case are undisputed. In that case, the identical chemical compound was disclosed in the parent and CIP applications. In the CIP application, however, a new utility for that compound was disclosed and the utility disclosed in the parent application was not carried forward into the CIP application. The Court of Custom and Patent Appeals concluded that the claims in the CIP directed to the compound were entitled to the effective filing date of the parent application under § 120. *In re Kirchner*, 305 F.2d at 903-904, 134 USPQ at 330.

The Examiner asserts that the *Kirchner* decision identifies two requirements that must be met to obtain the benefit of an earlier filing date under § 120:

1) that “the invention” being claimed in the later filed CIP application must have been disclosed in the earlier filed Parent application in such manner so as to comply with the first paragraph of section 112;

*AND* .....

2) that said “invention”, as disclosed in the parent application in a manner that complies with the first paragraph of section 112, **be the “same invention” as that which is disclosed in the later application.**

Office action, p. 20-21 (emphasis in original). Applicants see no reason to restate the clear language of *Kirchner*. Regardless, there is nothing about this restatement that sanctions an abstract comparison of applicants’ specifications outside of the context of a specific claim. What the *Kirchner* decision requires is that the invention—as defined by the *claims* (not the disclosure) of the CIP application—be disclosed in both applications. *In re Kirchner*, 305 F.2d at 903-904, 134 USPQ at 330. Each relevant claim defines only one invention, and although the invention must be disclosed in both applications, each application clearly can describe and support that invention in different ways.

In the instant application, each of the relevant inventions, as defined by the currently pending claims, is supported by similar disclosure from both specifications. *See* Declaration of Dr. Ligler. Applicants acknowledge that the 1987 disclosure contains numerous improvements and enhancements to the 1981 disclosure. Notwithstanding this fact, as long as each of applicants’ inventions claimed in the instant application is described adequately in both specifications, the test under § 120 is met. Contrary to the Examiner’s assertions, applying the straightforward test described by applicants to the instant claims will ensure that applicants’ do not obtain the benefit of a 1981 filing date for claims that include limitations of the various improvements and enhancements found in the 1987 specification. If applicants attempt to include limitations of the improvements and enhancements from the 1987 specification in a given claim, that claim

could not receive priority under § 120 because the claim could not be supported under § 112 by the subject matter disclosed in the 1981 specification. This does not mean, however, that applicants cannot rely on passages from the 1987 specification that include those improvements and enhancements to support a claim that does not include limitations of those improvements and enhancements. The question is whether or not the provided 1987 support describes the more basic inventions being claimed, regardless of whatever else those passages may also describe.

Further, contrary to the Examiner's allegations, applicants do not assert that different subject matter can be used to give a pending claim "different interpretations." In the following quote, the Examiner mischaracterizes applicants' position on this issue:

According to applicant's way of thinking, the only thing that applicant needs to do in order to obtain the earlier 1981 filing date for his pending amended claims is to show that each of his pending amending claims can be given different 1987 and 1981 claim interpretations which allows each claim to be respectively supported, in parallel, by "different subject matter" from the two specification. [sic]

Office action, p. 4. Applicants do not assert that a given claim must or should be interpreted in different ways when determining whether or not the claim is supported by the two specifications. A given claim must be given one consistent interpretation—the broadest reasonable interpretation—when determining if the claim is supported by the each specification. The Examiner's various allegations that, due to certain additions included in applicants' 1987 specification, the pending claims must necessarily (at least sometimes) be given two different interpretations is wrong. Following the mandate that the claims are to be given the broadest reasonable interpretation consistent with the specification, each claim can be interpreted in a clear and consistent manner with reference to both specifications.

Similarly, with respect to the instant application, as long as additional details or enhancements present in the 1987 specification are not inconsistent with a broad claim



interpretation that would be supported by both disclosures, it would be improper to use details or enhancements from the 1987 specification to interpret a claim narrowly. Accordingly, the Examiner is wrong to conclude in Section I (C) of the Office action that “the instant 1987 disclosure imposes very real modifications onto the meaning/scope of the currently pending amended claims in a way that was not supported by the past 1981 Parent specification as originally filed.” Office action, p. 8. *See* Declaration of Dr. Ligler, ¶¶ 40-54.

**d. Applicants Claims Are Directed To The Same Inventions Disclosed In Both Specifications**

To counter applicants’ position that the pending claims are entitled to a 1981 priority date, Examiner asserts that inventions described in the 1981 specification and the inventions described in the 1987 specification are “different inventions.” *See* Section (I) (B) of the Office action.

Applicants’ acknowledge that the 1987 specification contains significant new matter that is not found in the 1981 specification. Notwithstanding this fact, the relevant inventions are defined by the scope of each pending claim, and each pending claim is supported by a description of that particular invention in both specifications. An invention may be described in different ways and still be the same invention, and applicants continue to maintain that those features of the basic system disclosed in the 1981 specification which applicants rely on for § 112 support are also found in the 1987 specification. Often the same or very similar language is used to describe the systems/methods and the systems/methods’ elements/steps in the 1981 and 1987 specifications.

As applicants explained in their Response to Interview Summary, the fact that applicants’ CIP application includes new matter is not evidence that applicants did not carry forward the previously disclosed subject matter into the 1987 specification. Many

of the signals described in the 1987 specification under the discussion of SPAM perform the same functions as signals described in the 1981 specification. Just because the functionalities of such signals are disclosed in the context of a SPAM messaging protocol in the 1987 specification does not mean that signals performing the same functions were not disclosed in the 1981 specification. *See, e.g.*, Declaration of Dr. Ligler, ¶¶ 29, 30, 31, and 53. Accordingly, these control and instruct signals are described by both specifications, even though they may be disclosed in the context of a SPAM messaging protocol in the 1987 specification.

**e. Applicants' Reliance For § 112 Support  
On Portions Of The 1987 Specification  
That Include Details And Enhancements  
Not Found In The 1981 Specification Is  
Proper**

The Examiner takes issue with the support applicants have identified in the dual column charts provided for each of the pending claims. The written description support from the 1987 specification identified by applicants for many of the currently pending claims are examples from the 1987 specification that also include details and enhancements that are not found in the 1981 specification. The Examiner appears to argue that because the passages that applicants rely on from the 1987 specification include these details and enhancements, applicants are automatically precluded from obtaining priority for those claims under § 120. The Examiner's position is incorrect. Just because the 1987 specification discloses new details and enhancements to the general system, it does not mean that the basic aspects of the more advanced system cannot be used to support a claim directed to those basic aspects or features. The following passage from Section I (E) of the Office action highlights the Examiner's misunderstanding:

Apparently, it is applicant's position that the added/new 1987 subject matter contained within applicant's own citations of alleged section 112-1 support should be weeded out, discarded and/or ignored in order to allow the alleged underlying principles, ones that were allegedly carried

forward from the past 1981 parent specification, to emerge therefrom (thereby allowing applicant's subsequently filed CIP claims to obtain the earlier 1981 filing date of the parent application). The examiner thinks not!

Office action, p. 11. First, applicants want to make clear that it is not their position that the details and enhancements disclosed in applicants' 1987 specification need to be "weeded out, discarded and/or ignored" to allow those basic aspects or features of the 1987 disclosure which are also disclosed in the 1981 specification to "emerge therefrom." For a claim to be entitled to an earlier priority date under § 120, a claim must simply be supported under § 112 by both specifications. In determining whether or not a claim is properly supported under § 112, an Examiner is not required to weed out, discard, or ignore certain portions of the specification—the specification either contains the necessary support or it does not.

As applicants have already stated, the starting point for analyzing the § 112 and § 120 issues is what is recited in the claims. In the 8/28/01 and 7/18/02 Office actions, the Examiner has repeatedly indicated his wholly unsupported belief that applicants' are reciting in the instant claims the improvements and enhancements that are found only in the 1987 specification. For example, in the 8/28/01 Office action the Examiner stated:

Clearly, the "more sophisticated" 1987 alleged inventions that are *necessarily being claimed* are not entitled to the 1981 filing date

[A]ll limitations of the currently pending claims are necessarily directed to that which is described in the present 1987 disclosure; namely, the more "sophisticated" systems/methods of the present 1987 disclosure.

8/28/01 Office action, pp. 12, 47. Applicants, in their 1/28/02 Response quoted the second quote identified above as follows:

all limitations of the currently pending claims are necessarily [only] directed to that which is described in the present 1987 disclosure

1/28/02 Response, p. 144. Applicants added the word “only” (clearly bracketed to reflect that it was not the Examiner’s original language) to point out applicants’ understanding of the Examiner position on this issue. Specifically, applicants understand the Examiner’s statements above to mean that he is of the view that the claims of the instant application must be claiming subject matter disclosed in the 1987 specification but that is *not disclosed* in the 1981 specification.

In the 7/17/02 Office action, the Examiner now quotes this passage from applicants’ 1/28/02 Response, but omits the bracketed “only” language. Thus, several times in the 7/17/02 Office action the following *inaccurate* statement appears, which is attributed as “applicants’ position:”

the [examiner’s] assumption that ‘all limitations of the currently pending claims are necessarily directed to that which is described in the present 1987 disclosure’ is mistaken and wholly unsupported.

Office action, p. 15, 54, 59. *This is not applicants’ position and applicants did not make the quoted statement.* In their 1/28/01 response, applicants’ position was simply that the Examiner has incorrectly, and without support, asserted that applicants’ claims recite the “sophisticated,” or enhanced or improved subject matter that is disclosed *only* in the 1987 specification. Had the Office action simply quoted applicants correctly, applicants’ position would have been clear. However, by misquoting applicants’ prior Response, the Office action appears to characterize applicants’ position as being something that they have never asserted. Applicants’ position has been consistent: 1) the pending claims do not recite the improved subject matter that is only disclosed in the 1987 specification; and 2) the pending claims are supported by subject matter that is disclosed in both specifications.

In Sections (G) and (H) of the Office action, the Examiner again asserts that applicants are claiming improved subject matter disclosed in the 1987 specification. Applicants’ maintain that none of the currently pending claims recite the “improved”

subject matter which *would only* be supportable by the details and enhancements found in the 1987 specification. Instead, all of the pending claims can be, and are in fact, supported by the basic aspects or features that are found in to both specifications—even if applicants identify portions of the 1987 specification that also contain, in addition to the basic aspects or features disclosed in the 1981 specification, certain details and enhancement only found in the 1987 specification. If a claim includes limitations of the improvements or enhancements found in the 1987 specification (i.e., the broadest reasonable interpretation of that claim is such that the claim is limited to the improvements or enhancements), then that claim cannot be supported by the 1981 specification. But this is simply not the case with the claims of the instant application.

**f. Applicants' "Dual" Column Support Charts**

The Examiner's assertion in Section I (I) of the Office action that applicants "do[] not wish to cite, or indeed [are] unable to cite section 112-1 support from the instant CIP disclosure for these limitations" is unwarranted. Office action, p. 16. By the time the Examiner issued the 7/17/02 Office action, applicants had provided the Examiner with the detailed dual column support charts (that the Examiner finds "most helpful," Office action, p. 16) *in every single pending application in which applicants assert a 1981 priority date*. Accordingly, it is simply disingenuous for the Examiner to state "[a] noteable [sic] exception being the most helpful claim charts of alleged "dual" § 112 support which applicant has, only on a few occasions, been willing to kindly provide." Office action, p. 15, n. 9.

In a very confusing portion of the Office action beginning on page 53, the Examiner denies that he has ever "objected" to applicants' submission of the dual column support charts, despite the appearance of the following passage in the 8/27/01 Office action:

At most, applicant might have to provide a cursory explanation as to how the limitations of the pending claim are supported by such identified “EXAMPLE”/ “SECTION”. So where is it? Instead of citing a section/example and quickly explaining how support is provided for each claim the cited example/section, applicant feels the need to provide a massive exhibit (i.e. APPENDIX A-C) which maps limitations of the pending amended claims to scattered portions of the present omnibus 1987 disclosure.

8/27/01 Office action, p. 39 (footnotes omitted). Applicants acknowledge that the Examiner has since made it clear that the support charts are appropriate and helpful.<sup>4</sup> But certainly, applicants’ concern regarding the Examiner’s reaction to the support charts was justified in view of the above-quoted passage.

In the instant Response applicants also include a declaration by an expert, Dr. Ligler, that explains how applicants’ claims are supported by both specifications. Accordingly, applicants have provided: 1) detailed charts demonstrating precisely where in each specification the relevant support exists for each claim limitation; 2) narrative summaries explaining how the relied upon support from each specification supports each claim in a similar fashion; and 3) an expert declaration further addressing the adequacy of the support relied upon by applicants for the claims, as amended. Applicants respectfully request that the Examiner respond, on a claim-by-claim basis, with a reasoned analysis as to why the ample evidence of written description support provided by applicants for each claim does not meet the requirements of § 112, if those rejections are maintained.

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<sup>4</sup> It should be noted that in response to the objections made to the charts in the 8/27/01 Office action, applicants provided narrative summaries which explain how each claim (as amended) is supported by both specifications, as suggested by the above-quoted passage. In spite of the considerable effort that was undertaken by applicants to provide these summaries of how each claim is supported by both specifications, the Examiner did not respond to or even acknowledge the summaries in the recent Office action.

In Section III the Examiner also asserts that applicants have “misled” the Examiner and the Office about the requirements of §§ 112 and 120. Specifically, the Examiner relies on the following quote from a paper filed by applicants:

The present application claims priority under 35 U.S.C.  
§ 120 of the following applications . . . .Consequently,  
Applicants will demonstrate disclosure only with respect to  
the '81 case . . .

Office action, p. 53. First, applicants firmly deny ever having misled the Examiner or the Patent Office about what is required under §§ 112 and 120. The above quote, which originally appeared in applicants' 8/6/97 Amendment filed in the instant application, simply reflects applicants' long held view that the claims of the instant application are entitled to the 1981 priority date. The Examiner is incorrect in his implication that applicants misled the Office into believing that the 1987 specification was somehow irrelevant to complying with §§ 112 and 120. Indeed, in the very document cited by the Examiner, applicants provided citations in footnotes to the 1987 specification (which corresponded to the 1981 specification citations also provided in the same paper) when demonstrating written description support. *See* 8/6/97 Amendment at p. 20.

Applicants note that the Examiner's unjustified, and in fact, improper allegation has nothing to do with his criticism of applicants' submission of the dual column support charts. Rather than support the Examiner's position that applicants have somehow “misled” the Office on the legal requirements for priority, the dual column support charts actually demonstrate applicants' extensive efforts to assist the Examiner in determining that the claims are supported by both specifications. Further, applicants have voluntarily identified to the Examiner precisely which of applicants' copending applications are entitled to a 1981 priority date and which are not. The law clearly does not require this (until such time that an intervening reference is applied that applicants wish to antedate). And, of course, both specifications have been before the Examiner during the entire

course of prosecution, thereby allowing the Examiner to conduct any appropriate analysis required with respect to the §§ 112 and 120 issues.<sup>5</sup>

Finally, applicants note that it is improper for the Examiner to make such allegations. These allegations unfairly disparage applicants and, in applicants' view, improperly discredit the Office. Indeed, the M.P.E.P. prohibits Examiners from commenting on such issues. *See* M.P.E.P. § 2010. In fact, the very Appendix cited by the Examiner in Section III (i.e., the Appendix to the document mailed on 9/10/01 in application Ser. No. 08/474,139) was withdrawn by the Patent Office pursuant to § 2010 of the M.P.E.P. because the allegations made therein "are unrelated to the issue of patentability of the subject matter claimed in applicants' pending applications and were not made pursuant to a duty of the Examiner imposed by law." *See* Interview Summary mailed on 3/21/02 in application Ser. No. 08/474,139. Accordingly, these improper allegations must be withdrawn, along with any rejections or objections based thereon.

**g. The Examiner's Struggle With  
Determining What Exactly Is Being  
Claimed In Applicants' Pending Claims**

In Section I (I) of the Office action the Examiner discusses his difficulty in determining what exactly is being claimed by applicants in their pending claims. Contrary to the Examiner's assertions, applicants have provided substantial assistance (e.g., the support charts, narrative summaries of support, detailed responses to the Examiner's § 112-1 "Examples" in the 8/27/01 Office action, and now Dr. Ligler's Declaration) to the Examiner with respect to what exactly is being claimed in the pending application and how each claim is supported under § 112 in both specifications.

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<sup>5</sup> Applicants note that they have relied on ample controlling authority to support their position on the requirements of §§ 112 and 120. In contrast, applicants have had to contend with the wholly unsupported "wiggle room," "pledge," "smudge," and "metes and bounds" theories advanced in the Office action.



The Examiner's attempt to support his position that he has difficulty understanding what applicants are claiming in the instant application by relying on various quotations from Judge Luckern's Initial Determination in the ITC litigation (*see* Section I (I), p. 16) is without merit. First, as applicants have already noted, with respect to the only claim even challenged under the written description requirement of § 112, Judge Luckern concluded that the claim was not invalid on that basis.<sup>6</sup> Second, Judge Luckern's belief that the 1987 specification is "difficult to understand as it is dealing with many possible systems," even if true, is not a proper reason for the Examiner to conclude that none of applicants' claims are supported under § 112. Further, the comments advanced by the Staff in the ITC litigation describing "directions to a treasure map" and "ships passing in the night" can hardly be applicable to the instant application. In the instant application, applicants have gone to great lengths to provide, explain and demonstrate exactly how the pending claims are supported in both specifications. Finally, as the attached Declaration of Dr. Ligler demonstrates, one of ordinary skill in the art would recognize that the subject matter of applicants' claims is adequately described by both specifications.

The Examiner apparently has difficulty with the fact that applicants at times are claiming inventions in the pending claims that do not use precisely the same words that are disclosed in the 1987 and 1981 specifications. The fact that the identical words are not used in applicants' claims is of no consequence as long as one skilled in the art would recognize that applicants disclosed that invention in both specifications. *See Eiselstein*, 52 F.3d at 1038, 34 USPQ2d at 1470; *Kennecott Corp.*, 835 F.2d at 1422, 5 USPQ2d at 1197. In determining "what exactly is being claimed" the Examiner appears to rely on the specification(s) to limit the scope of the claims. For example, with respect to many of

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<sup>6</sup> Additionally, in allowing the claims asserted in the ITC to issue, the PTO understood that those claims were adequately supported under § 112.

applicants' pending claims, the Examiner looks to the support relied on by applicants in their 1987 specification, and then, in interpreting the pending claim, the Examiner reads the various details from the relied upon support in the 1987 specification into the pending claims. After the Examiner has interpreted the claims to "necessarily" incorporate and be limited to the details found in applicants' 1987 specification, the Examiner concludes that the claim cannot possibly be supported by the 1981 specification because the details that the Examiner has found to be incorporated into the claims are not present in the 1981 specification. The Examiner's analysis is flawed. The proper analysis of whether written description support exists for a pending claim and whether a pending claim is to be entitled to an earlier priority date begins with the language of the claim. Of course, in interpreting a claim the Examiner can, and indeed should, use the relevant portions of the specification to understand and interpret the claim, but the Examiner must give the claim the broadest reasonable interpretation consistent with the specification. Then the Examiner must determine whether the claim is supported under § 112, first paragraph, by the instant 1987 specification, and then by the 1981 specification.<sup>7</sup> As applicants have repeatedly and consistently asserted, the portions of the 1987 specification identified by applicants to support a particular claim include the basic subject matter disclosed in the 1981 specification. The fact that portions of the 1987 specification relied upon by applicants to support a particular claim may also include various details, enhancements and/or improvements that are not found in the 1981 specification is of no consequence.

In Section I (T) of the Office action, the Examiner contends that applicants are improperly using the "new and "expanded" 1987 disclosure:

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<sup>7</sup> The Examiner and applicants agree that because applicants' position on priority has been challenged, the Examiner must first determine whether or not § 112 support exists in the 1987 specification. Only after the Examiner has concluded that support exists in the 1987 specification does the Examiner need to determine whether or not support exists in the 1981 specification.

- 1) to expand and/or modify the teachings which were originally conveyed by the disclosure of his 1981 parent application;
- 2) to draft new amended claims based on these “new”, “expanded”, and/or “modified” teachings of the 1987 CIP disclosure so as to impart the “new” and “expanded” 1987 scope and meaning to the newly drafted amended claims; and then
- 3) to allege that the amended claims, having the “new” and “expanded” 1987 scopes and meanings, are entitled to the 1981 priority of the originally filed parent disclosure which does not support these “new” and “expanded” 1987 scopes and meanings.

Office action, p. 34. The primary flaw in the Examiner’s argument is the notion that simply relying on support from the 1987 specification, automatically “imparts” a scope or meaning to the claims such that they are limited to the “new” or “enhanced” teachings from the 1987 specification. There is absolutely no legal basis to support the Examiner’s assumption that details from the specification must be read into the claims as limitations. If the “new” or “enhanced” teachings from the 1987 specification do not exist in the language of a currently pending claim the claim need not be, and in fact should not be, interpreted by the Examiner to include such “new” or “enhanced” teachings. *See In re Bass*, -F.3d-, No. 02-1046, 2002 WL 31818303 at \*2 (Fed. Cir. Dec. 17, 2002) (“In examining a patent claim, the PTO must apply the broadest reasonable meaning to the claim language, taking into account any definitions presented in the specification.”); M.P.E.P. § 2111 (“pending claims must be ‘given their broadest reasonable interpretation consistent with the specification’”).

The Examiner makes a similar allegation in Section I (R) of the Office action where he asserts that

[The] 1987 teachings that only exist within the instant “1987” disclosure necessarily contribute to the scope/meaning that must now be given to the limitations of the currently pending amended claims and thus, there is simply no way that these claim limitations can be interpreted as being limited **solely** to subject matter which

was adequately disclosed in the 1981 parent application via all of the requirements of section 112.

Office action, p. 32 (emphasis in original). As already explained above, the Examiner is simply incorrect from both a factual and legal perspective, in his assumption that certain enhancements and improvements that are found in the 1987 specification but not in the 1981 specification *must* be read into the scope or meaning of applicants' currently pending claims. The crucial point that the Examiner does not appear to accept is that none of applicants' pending claims contains limitations of the enhancements, improvements or details that are found only in the 1987 specification. While the passages from the 1987 specification that applicants rely on to support their pending claims may include various enhancements, improvements and details not found in the 1981 specification, they also include those basic or general aspects which *are* also disclosed in the 1981 specification. *Applicants' position on this issue is made abundantly clear by the fact that all of the pending claims can, in fact, be supported by the subject matter disclosed in the 1981 specification which does not contain any of the improvements or enhancements. See Declaration of Dr. Ligler.*

**h. Although Differences Between The 1981 And 1987 Specifications Exist, There Are No Significant Inconsistencies Between The Two Specifications**

In Section I (J) of the Office action the Examiner lists several examples which allegedly support his position that there significant inconsistencies between the 1981 and 1987 specifications. First, without providing any detail or analysis the Examiner asserts that 1987 specification "sets forth circuit configurations for the current 1987 inventions which differ from the circuit configurations of the past '1981 inventions' . . ." Office action, p. 17. Even though there are some differences between the circuit configurations described in the two specifications, the configurations are not inconsistent and there is no reason why such differences would preclude applicants from demonstrating sufficient

§ 112 support in each specification for the pending claims. Indeed, as shown below, there are *substantial similarities* between the circuit configurations of both disclosures, which support applicants' position that the 1981 subject matter *has* been carried forward into the 1987 specification.

Again, as discussed above, the starting point for analyzing whether a claim is supported under § 112 and whether a claim should be entitled to an earlier priority date under § 120 is determining what is being claimed. Differences between the support that is relied upon by an applicant in two specifications are irrelevant as long as what is being relied on by the applicant in both applications provides sufficient support for the claim. *See Johnson*, 454 F.2d at 751, 172 USPQ at 395. Second, the Examiner also alleges that the 1987 specification sets forth more advanced signaling structures and processing than found in the 1981 specification. Again, even if true, the enhanced and improved signaling structure and processing of the 1987 specification do not preclude applicants from demonstrating sufficient § 112 support in each specification. Third, the Examiner alleges that certain "blocks" in the 1987 diagrams have "new/expanded/different" functions and operations associated with them compared to the 1981 specification. Office action, p. 17 The Examiner fails to identify any specific example from the diagrams and does not even argue the alleged differences are at all inconsistent. Fourth, and again without reference to any specific examples, the Examiner alleges in Section I (J) of the Office action that applicants use certain terminology differently and inconsistently in the two specifications. Without reference to specific examples, applicants cannot meaningfully respond to the Examiner's unsupported allegations.<sup>8</sup> Applicants note, however, that unless the alleged "inconsistencies" and alleged use of "different terminology" prevents applicants from demonstrating that a specific claim or

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<sup>8</sup> Applicants do respond in detail to *specific* examples addressing alleged inconsistencies raised by the Examiner in Section I (V) of the Office action.

claim limitation is adequately supported by both specifications, the Examiner's allegations are not relevant.

In Section I (K) the Examiner asserts that he must compare applicants' two specifications in order to determine whether the specifications "describe the same invention, contain common subject matter or have descriptions that are inconsistent, etc." Contrary to the Examiner's assertions, applicants' position is not that the Examiner cannot perform such comparisons. Instead, applicants simply believe that none of these comparisons are required under the proper legal tests applicable to § 112 and § 120.

**i. The Examiner's Continued Discussion Of  
"Programming"**

Applicants and the Examiner continue to disagree over their interpretation of the term "programming" and the use of that term in applicants' 1981 and 1987 specifications. In applicants' view, which is set forth in detail in their Response to Interview Summary, the Examiner continues to interpret the 1981 definition in a unjustifiably narrow manner.

In the instant application, as amended, the term programming is not used in the manner objected to by the Examiner. The Examiner questions applicants' use of the term programming to refer to computer instructions or software. In claims 57, 58 and 71, the term programming is used as a verb to refer to the step of "programming" a video apparatus or computer to perform certain steps. The term "programming" is no longer used as a noun in the currently pending amended claims. Accordingly, applicants do not use the term "programming" in the pending claims in a manner objected to by the Examiner.

Although applicants' continue to disagree with the Examiner regarding applicants' ability to use the term "programming" in claims for which applicants claim 1981 priority, *see also* Declaration of Dr. Ligler, ¶¶ 41-44, the issue is moot in this application. Applicants, however, reserve their right to further address the "programming" issue, if and when the issue is pertinent to any pending claim.

**j. The Examiner's Examples Of  
"Inconsistencies" Between The 1981 And  
1987 Specifications**

In Section I (V) the Examiner identifies and discusses several alleged inconsistencies between the two specifications. As an initial matter applicants submit that any perceived inconsistencies are only relevant to the extent that the alleged inconsistency impacts or affects a pending claim. It is simply improper for the Examiner to continue to focus on alleged "differences" or "inconsistencies" without reference to a specific claim.

**(1) Programming**

Applicants have stated above that the Examiner's discussion of the "programming" issue is not relevant to the instant application because they do not use that term in any pending claim in a manner objected to by the Examiner. In Section I (V) of the Office action, the Examiner contends that even if applicants avoid literally using the term "programming" in the claims, "the 'expanded' 1987 definition of the 'programming' terminology nonetheless continues to impart its expanded scope and meaning onto all of the 1987 disclosures that are described in terms of this expanded 1987 'programming' definition." Office action, p. 37. Applicants do not understand what the Examiner means when he asserts that the 1987 definition of programming somehow "imparts its expanded scope and meaning onto all of the 1987 disclosures that are described in terms of this expanded 1987 'programming' definition," and the Examiner provides no examples to support this statement. Applicants do not see how the "programming" issue can be relevant to claims that do not use that term. *See also* Declaration of Dr. Ligler, ¶¶ 41-44. If the Examiner disagrees, the impact must be explained in the context of specific pending claims—not in a generalized manner that fails to take into account the subject matter being claimed.

The Examiner further asserts that “these expanded 1987 disclosures continue to impart expanded 1987 scopes and meanings onto the limitations of the currently pending amended claims which necessarily derive required section 112 support therefrom.” Office action, p. 37. As applicants have stated above, it is improper for the Examiner to use the written description support that applicants rely on from the specifications to read limitations from the specification(s) into applicants’ claims when the claims do not expressly contain those limitations. Accordingly, the Examiner’s position contradicts the prohibition of reading limitations from the specification into a claim, *see Burke*, 183 F.3d at 1340, 51 USPQ2d at 1299; *Intervet*, 887 F.2d at 1053; 12 USPQ2d at 1476, and the requirement that an Examiner give pending claims their broadest reasonable interpretation consistent with the specification. *See In re Bass*, -F.3d-, No. 02-1046, 2002 WL 31818303; M.P.E.P. § 2111 (8<sup>th</sup> ed. 2001). The Examiner’s attempt to read the definition of programming from the 1987 specification into currently pending claims that do not use that term is improper and contrary to the law.

**(2) The Signaling Structures Disclosed  
In The Specifications**

**(a) Introduction**

The inventions disclosed in both specifications and claimed in the instant application are generally directed to transmitting and processing of signals that are transmitted and then received at receiver stations. The 1981 and 1987 specifications both use various terminology to describe the numerous types of “signals” that are transmitted to, among other things, receiver stations. For example, the specifications disclose signal words, signal units, instruction signals or instructions, identifier signals or identifiers, control signals, commands and many other specific signals. Additionally, the specifications disclose several embodiments for embedding the various types of signals. For example, the 1981 specification discloses that signals:



may run and repeat continuously throughout the programming or they may run only occasionally or only once. They may appear in various and varying locations. In television they may appear on one line in the video portion of the transmission, or on a portion of one line, or on more than one line, and will probably lie outside the range of the television picture displayed on a normally tuned television set. In television and radio they may appear in a portion of the audio range that is not normally rendered in a form audible to the human ear. In television audio, they are likely to lie between eight and fifteen kilohertz. Signals may also be transmitted on frequencies outside the ranges of television and radio. Different and differing numbers of signals may be sent in different and differing word lengths and locations.

1981 Specification, col. 4, ll. 15-30.

The 1987 specification similarly discloses these ways of embedding and transmitting signals:

In programming transmissions, given signals may run and repeat, for periods of time, continuously or at regular intervals. Or they may run only occasionally or only once. They may appear in various and varying locations. In television they may appear on one line in the video portion of the transmission such as line 20 of the vertical interval, or on a portion of one line, or on more than one line, and they will probably lie outside the range of the television picture displayed on a normally tuned television set. In television and radio they may appear in a portion of the audio range that is not normally rendered in a form audible to the human ear. In television audio, they are likely to lie between eight and fifteen kilohertz. In broadcast print and data communications transmissions, the signals may accompany conventional print or data programming in the conventional transmission stream but will include instructions that receiver station apparatus are preprogrammed to process that instruct receiver apparatus to separate the signals from the conventional programming and process them differently. In all cases, signals may convey information in discrete words, transmitted at separate times or in separate locations, that receiver apparatus must assemble in order to receive one complete instruction.

1987 Specification, P. 14, ll. 3-25. Thus, contrary to the Examiner's assertions, there is substantial overlap in the disclosures of various means and manners for embedding and transmitting signals.

Applicants acknowledge that certain details related to the enhanced and improved embodiments for embedding and transmitting signals disclosed in the 1987 specification are not expressly disclosed the 1981 specification. Applicants do not, however, include these limitations in the pending claims of the instant application. Despite this fact, the Examiner continues to argue in the abstract and without reference to any particular claim, that none of applicants' claims are entitled to the 1981 priority date because applicants' two specifications disclose different and inconsistent signaling technology:

The examiner notes that "SPAM" technology, on which the "more sophisticated" systems of applicant's present 1987 disclosure are based, is vastly different from the "cuing-type signal" technology on which the "primitive" systems of applicant's 1981 parent application were based; e.g. the ability of SPAM to carry and distribute "software" being but just one of the more notable difference. Clearly, the "more sophisticated" 1987 alleged inventions that are now *necessarily being claimed* are not entitled to the 1981 filing date of their 1981 "primitive" ancestors; i.e. applicant is not allowed to transport his "more sophisticated" 1987 alleged inventions back in time to the 1981 filing date of his different, albeit sometimes "correlated", "primitive" 1981 alleged inventions.

Office action, p. 86 (emphasis in original). While the above quote mischaracterizes the enhanced and improved signaling technology disclosed in 1987 and the signaling technology disclosed in the 1981 specification, the most egregious flaw in the Examiner's argument above is in his assertion that applicants are "now necessarily" claiming the "more sophisticated systems" disclosed in the 1987 specification. Even a brief review of the claims actually pending in the instant application demonstrates that applicants have not included limitations of any such improvements or enhancements found only in the

1987 specification. The Examiner, however, steadfastly refuses to support his position with references to or analyses of specific claims.

The following sections address the Examiner's allegations of how applicants' disclosures related to signaling are inconsistent.

### (b) Instruct Signals

The Examiner asserts that the "instruct signals" disclosed in the 1987 specification are inconsistent with the "instruct signals" disclosed in the 1981 specification. The Examiner's assertion is incorrect. The term "instruction signal" is used in the 1987 specification in the discussion of the Wall Street Week ("WSW") example. *See* 1987 Specification, p. 25-26. Likewise, the term "instruction signal" is used in the WSW example in the 1981 specification. As the following chart demonstrates, the instruction signals used in the 1987 Wall Street Week example are disclosed in a very similar manner as the "instruction signals" disclosed in the 1981 specification:

1981 Specification	1987 Specification
Microcomputer, 205, is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programing transmission. . . .	Microcomputer, 205, is preprogrammed to receive said input of signals at its asynchronous communications adapter and to respond in a predetermined fashion to instruction signals embedded in the "Wall Street Week" programming transmission. . . .
Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated in the television studio originating the programing and is transmitted in the programing transmission. This signal is identified by decoder, 203, and transferred via processor, 204, to microcomputer, 205.	Then the host says, "And here is what your portfolio did." At this point, an instruction signal is generated at said program originating studio, embedded in the programming transmission, and transmitted. Said signal is identified by decoder, 203; transferred to microcomputer, 205; and executed by microcomputer, 205, at the system level as the statement, "GRAPHICS ON".

<p>This signal instructs microcomputer, 205, to transmit the first overlay to TV set, 202, for as long as it receives the same instruction signal from processor, 204. The viewer then sees a microcomputer generated graphic of his own stocks' performance overlay the studio generated graphic. (Col. 19, line 7 - Col. 20, line 7.)</p>	<p>Said signal instructs microcomputer, 205, at the PC-MicroKey 1300 to overlay the graphic information in its graphics card onto the received composite video information and transmit the combined information to TV monitor, 202M. TV monitor, 202M, then displays the image shown in Fig. 1C which is the microcomputer generated graphic of the subscriber's own portfolio performance overlaid on the studio generated graphic. (P. 21, ll. 20-24; P. 25, l. 33 - P. 26, l. 11.)</p>
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Applicants' use of the term "instruction signal" in both specifications, as reflected in the above chart, is consistent. Further, the above chart clearly demonstrates that both specifications disclose instruction signals that are not "computer software/programming," as the Examiner uses that term. *See also* Declaration of Dr. Ligler, ¶¶ 30 and 46. The Examiner's position, on the other hand, is wholly unsupported. Moreover, the Examiner fails to discuss the term in the context of any pending claim.

### (c) Signal Word

In Section I (V) (3) of the Office action, the Examiner asserts that applicants use the term "signal word" inconsistently in the 1981 and 1987 specifications. Despite the Examiner's assertions, applicants' use of the term "signal word" in the 1987 specification is not inconsistent with applicants' use and definition of that term in the 1981 specification. As acknowledged by the Examiner, applicants carried forward the identical definitions of "signal word" (and the term "signal unit") from the 1981 specification into the 1987 specification. Despite the fact that the term "signal word" is defined identically in both specifications, the Examiner argues that applicants use the term in a manner that is "inconsistent" and repugnant" to its definition.

The term "signal word" is defined in both specification as follows:

The term "signal word" hereinafter means one full discrete appearance of a signal as embedded at one time in one

location on a transmission. Examples of signal words are a string of one or more digital data bits encoded together on a single line of video or sequentially in audio. Such strings may or may not have predetermined data bits to identify the beginnings and ends of words. Signal words may contain parts of signal units, whole signal units, or groups of partial or whole signal units or combinations.

1981 Specification, col. 3, ll. 3-12; 1987 Specification, p. 14, l. 32 - p. 15, l. 6. The Examiner asserts without support or explanation that the term signal word is used throughout the 1987 specification in a manner inconsistent with its definition to refer to “the N-bit bytes of ‘computer-type’ data which make up the digital information that is now distributed and/or processed by the 1987 inventions.” Office action, p. 39. The Examiner asserts that although the term “signal word” is defined in the 1987 specification to refer to “each occurrence/appearance of ancillary signaling within the distributed TV/Radio/Other programming” the term is actually used in the 1987 specification to refer to “the ‘words’/bytes of digital computer-type data which comprise (and do not carry) said ancillary signaling.” *Id.*

Applicants do not fully understand the Examiner’s argument. Applicants’ use of “signal word” throughout the 1987 specification is consistent with its definition. Applicants defined the term “signal word” broadly to include many different types of signals. The definition states that “signal words may contain parts of signal units, whole signal units, or groups of partial or whole signal units or combinations.” Applicants’ use of the term “signal word” in connection with data (computer type or otherwise) of a certain bit length is not inconsistent with this definition. The definition of “signal word” is in no way limited to preclude applicants use of the term in connection with the “N-bit bytes of computer type data.” The Examiner provides no argument, justification or reason whatsoever to support his opinion that applicants’ definition of “signal word” is inconsistent with this usage. Further, there is no reason why a person of ordinary skill in the art would not understand that applicants’ definitions of signal words and signal units

are applicable to the SPAM messaging protocol disclosed in the 1987 specification. *See* Declaration of Dr. Ligler, ¶ 47.

Finally, applicants firmly dispute the following allegation made by the Examiner:

via slight of hand, the alleged meaning of the “signal word” terminology was quickly changed within the instant 1987 disclosure so as to refer to the “words”/bytes of digital computer-type data which comprise (and did not carry) said ancillary signaling

Office action, p. 39. This accusation is grossly inappropriate, and quite obviously, wholly unsupported. As applicants have explained above, they have not used the term “signal word” in a manner that is inconsistent with its definition in the 1987 specification. The Examiner fails to even suggest anything that would motivate applicants to engage in “slight of hand” when preparing their 1987 specification. Accordingly, this allegation, and any rejection or objection based thereon, should be promptly withdrawn.

**(d) The “SPAM” Transport Scheme vs. The 1981 Signaling Transport Scheme**

In Section I (V) (5) of the Office action, the Examiner asserts that the “SPAM transport scheme” disclosed by applicants in their 1987 specification is inconsistent with the signaling transport scheme disclosed in the 1981 specification. First, applicants dispute the Examiner’s characterization of the SPAM messaging scheme disclosed by applicants in their 1987 specification.

Applicants acknowledge that the 1987 specification discloses new ways for embedding signals in transmissions that were not disclosed in 1981. Applicants maintain, however, that the two specifications are consistent with respect to this issue. Certainly, both specifications contain the common disclosure of embedding signals in transmissions that are sent and then received at receiver stations where the signals are removed (i.e., stripped out) and processed. As long as applicants do not claim or include limitations of

the specific enhancements/improvements disclosed in 1987, there is no reason why both disclosures cannot support claims simply reciting that signals are embedded, transmitted, and processed (along with other features disclosed in both specifications). Accordingly, the Examiner is incorrect in making the conclusory statement that “all of the currently pending amended claims have at least one limitation whose scope and meaning is defined by 1987 ‘SPAM’ signaling . . . none of the claims are entitled to the 1981 priority date of the parent disclosure which did not describe SPAM.” Office action, p. 43. As applicants have already explained, it is simply improper for the Examiner to read limitations of the enhanced and improved SPAM signaling scheme into claims that do not include any such limitations. A proper determination as to whether a specific claim is supported under § 112 can only be made by focusing on the specific limitations that actually exist in that claim. Applicants submit that if their claims are addressed on a claim by claim basis, one will conclude that both specifications provide adequate written description support. *See* Declaration of Dr. Ligler, ¶ 50.

### **(3) Inherency**

In Section I (V) (4) of the Office action, the Examiner requests applicants to identify all teachings from each specification that are inherently disclosed in the other specification. Applicants are aware of no authority that would obligate them to respond to this heretofor unheard of request. Of course, both specifications are and have been before the Examiner and are therefore available for any legitimate examining activity. To the extent that applicants need to rely on an inherent feature or features that exists in either disclosure to overcome a rejection or objection by the Examiner, applicants reserve the right to identify such inherent teachings in response to such a rejection.

In Section I (V) (4) of the Office action, the Examiner also challenges applicants’ use of the term “implicitly” in their Response to the Examiner’s 8/28/01 Office action. Specifically, the Examiner asserts, again without support, that:

what might have been “implicitly” taught in the past 1981 parent specification is irrelevant to section 112-1 support issues

[and]

The fact that the 1987 feature . . . was “implicitly” there is insufficient to establish something as being ‘inherent’

Office action, p. 40-41. The Examiner’s position is directly contradicted by the instructions in the M.P.E.P. on this issue:

While there is no *in haec verba* requirement, newly added claim limitations must be supported in the specification through express, implicit, or inherent disclosure.

M.P.E.P. § 2163 (I) (B).

To comply with the written description requirement of 35 U.S.C. 112, para. 1, or to be entitled to an earlier priority date or filing date under 35 U.S.C. 119, 120, or 365(c), each claim limitation must be expressly, implicitly, or inherently supported in the originally filed disclosure.

M.P.E.P. § 2163 (II) (A) (3) (b). Accordingly, the Examiner’s assertion that applicants’ had improperly invoked the term “implicitly” is without merit.

#### **(4) The Wall Street Week Example**

In Section I (V) (6), the Examiner asserts that while the Wall Street Week (“WSW”) examples described in both specifications “have their similarities, the actual methods/details/structures used to carry out these two Wall Street Week embodiments are quite different.” Office action, p. 43. The Examiner goes on to discuss alleged differences and then concludes that it would be “improper” to give claims directed to WSW a 1981 priority date “unless it can show that the support that is provided for the claims by both disclosures is in fact the same/common to both disclosures.” Office action, p. 46. The Examiner’s assertion is wrong for several reasons.

In his discussion of the WSW examples, the Examiner identifies two alleged differences between how the example is disclosed in both specifications. The Examiner



asserts that the “microcomputer (205)” in both specifications is different. The microcomputer from applicants’ 1987 specification is alleged to have “circuitry” for: 1) overlaying locally generated graphics over the TV signal broadcast, and 2) receiving, loading, and running downloaded computer software. In contrast, the Examiner alleges that the microcomputer disclosed in the 1981 specification: 1) lacks such overlaying circuitry, and 2) is preprogrammed with computer software to execute functions defined by received discrete instructions.

Applicants submit that the Examiner’s is incorrect with respect to these two aspects of how the microcomputer functions in the two WSW examples. First, the Examiner fails to identify any actual differences in the circuitry of microcomputer 205 with respect to the overlaying of locally generated graphics as evidenced by the disclosures. Instead, the Examiner makes sweeping and wholly unsupported allegations that the “elements” of the “structures” related to microcomputer, 205 disclosed in applicants’ 1981 and 1987 specifications are “clearly different in both structure and operation” and:

**showing that, as with applicant’s use of common terminology, it would be erroneous for one to assume that common labels and common reference numerals were used in applicant’s 1981 and 1987 disclosures as an indication of common elements or “common subject matter”.**

Office action, p. 44 (emphasis in original). Contrary to the Examiner’s assertion, applicants respectfully submit that applicants use of common terms and common numerals strongly suggests that there is, in fact, substantial overlapping subject matter in the two specifications. *See, e.g.*, Declaration of Dr. Ligler, ¶¶ 25, 40-54. Any differences do not impact the conclusion that both specifications support the pending claims. *See* Declaration of Dr. Ligler, ¶ 54. Second, while the WSW example disclosed in 1987 is capable of receiving programming that can be downloaded and run at microcomputer

205, the 1987 specification also indicates that microcomputer (like the microcomputer 205 in the 1981 specification) contains preprogramming. *See, e.g.*, 1987 specification, p. 14, ll. 15-22.

Applicants submit that the Examiner's discussion of the two WSW examples exaggerates any differences between the two examples in 1981 and 1987 specifications. Moreover, the Examiner fails to address the substantial similarities between the two Wall Street Week examples. Applicants maintain that all of the pending claims can be supported by those features and teachings of the 1981 WSW example that are also found in the 1987 example.

**(5) All Recitations Directed To  
"Signals/Instructions/Data"  
Conveyed In TV Transmissions  
Derive Support From SPAM  
Signaling First Disclosed In 1987**

In Section I (V) (7) of the Office action, the Examiner asserts that applicants' claim to a 1981 priority date is "refuted" because applicants claims "derive their required Section 112 support from the 'SPAM' signaling" that was not introduced until the 1987 specification was filed. Office action, p.p. 46-47. The Examiner is incorrect. As applicants have already stated, details related to the SPAM signaling structure that are not found in the 1981 specification need not, and indeed should not, be improperly read into applicants' pending claims. All of applicants' pending amended claims are adequately supported by both specifications, and details related to the SPAM signaling protocol that are not recited in applicants' claims have no bearing on the fact that applicants' claims are adequately supported by both specifications. *See* Declaration of Dr. Ligler, ¶ 50.

**(6) Differences Related To How  
Receiver Stations Are  
Programmed In The Two  
Specifications**

In Section I (V) (7) of the Office action, the Examiner argues that the receiver stations disclosed in applicants' 1981 and 1987 specifications differed in that the receiver station disclosed in the 1987 specification could be reprogrammed "on the fly," while the receiver station disclosed in the 1981 specification could not. First, applicants note that the Examiner does not make a rejection or objection in connection with the arguments made in Section I (V) (7) of the Office action. Second, the 1981 specification clearly discloses reprogramming the receiver station via receipt of a remote transmission over a telephone connection. *See* 1981 Specification, col. 9, ll. 21-22; *see also* Declaration of Dr. Ligler, ¶ 49. Finally, applicants note that the alleged differences between applicants' two specifications discussed in Section I (V) (7) of the Office action do not alter the fact that both specifications support the claimed subject matter. *See* Declaration of Dr. Ligler, ¶ 49.

**(7) The Examiner's Position On Best  
Mode Issues**

In Section I (V) (8) of the Office action, the Examiner presents an abridged version of his "best mode" based test for denying applicants' priority claim. Applicants responded to the Examiner's arguments concerning these best mode issues in detail in their 5/06/02 Response to Interview Summary. The Examiner has not acknowledged or responded to applicants' discussion of these issues. The Examiner appears to acknowledge that the Federal Circuit's holding in *Transco Prods., Inc. v. Performance Contracting, Inc.*, 38 F.3d 551, 32 USPQ2d 1077 (Fed. Cir. 1994) does not support his position, however, applicants' cannot determine whether or not the Examiner's position has changed on the overall issue. Applicants respectfully request that the Examiner

specifically respond to applicants' arguments on this issue, or withdraw the "best mode" based test for denying applicants' priority claim in its entirety.

**k. Arguments Related To Claims Previously  
Reciting The Term "Interactive Video"**

In Section II (1) of the Office action, the Examiner raises issues regarding applicants' use of the term "interactive video." Section II (1) of the Office action responds to applicants' response to a rejection made by the Examiner in his 8/28/01 Office action concerning a claim reciting the term "interactive video." In applicants' 1/28/02 Response, applicants noted that although they disputed the Examiner's basis for rejecting the relevant claim, they had nevertheless deleted the limitation "interactive" from the claim. Applicants maintain that both the 1981 and 1987 specifications unquestionably disclose "interactive video apparatus." *See, e.g.*, 1981 Specification col. 20, ll. 23-27, and "Local Input" in Figure 6D; 1987 Specification, p. 288, ll. 1-20. The term "interactive video" still does not appear in any of applicants' pending amended claims, and the issues raised by the Examiner in Section II (1) of the Office action are therefore moot. If and when the issues raised in Section II (1) of the Office action are germane to this application or any of applicants' other copending applications, applicants will respond further to the issues raised in Section II (1) of the Office action.

**l. The Examiner's Characterization (And  
Applicants' Alleged Misunderstanding)  
Of Teletext**

In Section II (2) of the Office action, the Examiner discusses his characterization of "standardized" Teletext and certain arguments advanced by applicants in their prior responses to certain prior art rejections made by the Examiner in his 8/28/01 Office action. Applicants fully address the issues raised in Section II (2) of the Office action in their discussion of the Examiner's prior art rejections below.

## **5. Response To The 30 Examples**

In Section IV of the Office action, the Examiner lists of 30 “Examples” discussing issues related to applicants’ compliance with §§ 112 and 120. The vast majority of the 30 Examples are simply verbatim duplicates of text that the Examiner has copied from earlier sections of the two most recent Office actions. Seven (7) of the Examples (Examples 1, 2, 3, 12, 15, 16, and 20) are copied from earlier sections of the 7/17/02 Office action. Nineteen (19) other Examples (Examples 4, 6-11, 13, 14, 17, 18, and 22-29) are copied from the Examiner’s 8/27/01 Office action in the instant application. Of the 30 Examples, only four (4) Examples present any “new” discussion of §§ 112/120 issues, and even these four Examples simply rehash arguments that have been advanced by the Examiner elsewhere.

At the beginning of Section IV, the Examiner alleges that in some cases applicants have “handled and addressed” these issues inconsistently in different applications. The Examiner states that the list of “Examples” will be maintained by the Patent Office “in an attempt to ensure consistency in the way that these issues are handled between applications in the future.” Office action, p. 56. Many of the issues discussed in the 30 Examples have been raised by the Examiner before in different forms in some of applicants’ various copending applications. In addressing such issues, applicants have at all times strived to address these reoccurring issues in a consistent manner in all of applicants copending applications. Applicants’ position on their ability to demonstrate that their pending claims can be supported under § 112 and their assertion that many of their claims are entitled to priority under § 120 have not changed. Further, applicants’ position with respect to what the law requires for applicants to satisfy §§ 112 and 120 has also not changed. Accordingly, applicants believe that the Examiner is mistaken in his unsupported assertion that applicants have “handled and addressed” the issues raised in the 30 Examples “inconsistently.”

Applicants also question the relevance of the 30 examples, as well as applicants' need to respond to these examples, because none of the examples forms the basis for any objection or rejection of a pending claim. *See* 37 C.F.R. § 1.111(b) (2001) ("In order to be entitled to reconsideration or further examination, the applicant . . . must reply to every ground of objection and rejection in the prior Office action."). Accordingly, all 30 Examples should be withdrawn in their entirety. Applicants reserve their right to further address any issue raised in the 30 Examples if the Examiner makes an actual rejection or objection based on any of the issues raised in the Examples.

#### **Example 1**

Example 1 is substantially identical to Section III (1) of the 7/17/02 Office action, which applicants have responded to above.

#### **Example 2**

Example 2 is substantially identical to the final part of Section I (A) of the 7/17/02 Office action, which applicants have responded to above.

#### **Example 3**

Example 3 is substantially identical to Section III (2) of the 7/17/02 Office action, which applicants have responded to above.

#### **Example 4**

Example 4, is substantially identical to Section II (1) of the 8/27/01 Office action in the instant application. Applicants have already fully responded to the issues raised in Example 4 in their 1/28/02 Response. The Examiner does not indicate that he has considered applicants' response to the issues raised in Example 4. In addition to applicants' prior response to the issues raised in Example 4, applicants address the "locally generating" issue in detail below. Applicants continue to respectfully disagree

with the Examiner's assertion that Teletext decoders locally generate images for output or display in the same manner as being claimed in the instant application.

#### **Example 5**

In Example 5, the Examiner asserts that applicants' 1987 "packetized SPAM" structure represents little more than applicants' own version of a "conventional extended Teletext system." The issues discussed in Example 5 are not discussed in the context of any of the claims currently pending in the instant application and the Examiner does not reject any of the pending claims based on the assertions made in Examples 5. If and when the Examiner makes rejections of specific pending claims on the basis of issues raised in Example 5, applicants will further respond to such rejections. Notwithstanding the lack of any rejection in Example 5, applicants strenuously disagree with the Examiner's disparaging assertions and characterizations of the subject matter disclosed in applicants' 1987 specification. Applicants note that they have previously addressed how applicants' claims differ from many "Teletext" prior art references in their prior responses in the instant application, and applicants further distinguish the currently pending claims from "Teletext" prior art references below.

#### **Example 6**

Example 6 is substantially identical to Section II (2) of the 8/27/01 Office action in the instant application. Applicants have already fully responded to the issues raised in Example 6 in their 1/28/02 Response. The Examiner does not indicate that he has considered applicants' response to the issues raised in Example 6. In addition to applicants' prior response to the issues raised in Example 6, applicants address the "computer software/programming" issue in detail above. Applicants continue to respectfully disagree with the Examiner's assertions regarding the "computer software/programming" issue. Finally, applicants note that none of applicants' currently

pending claims use the terms “computer software” or “programming” in the manner objected to by the Examiner in Example 6. *See also* Declaration of Dr. Ligler, ¶¶ 41-44.

#### **Example 7**

Example 7 is substantially identical to Section II (3) of the 8/27/01 Office action in the instant application. Applicants have already fully responded to the issues raised in Example 7 in their 1/28/02 Response. The Examiner does not indicate that he has considered applicants’ response to the issues raised in Example 7. Applicants continue to respectfully disagree with the Examiner’s assertions and characterizations of Teletext decoders found in the prior art and the signal processor disclosed by applicants. Applicants submit that the signal processors disclosed in applicants’ specifications perform functions that are not disclosed in the cited Teletext prior art references. Further, applicants note that the Examiner does not make any rejections of or objections to any of applicants’ pending claims in Example 7.

#### **Example 8**

Example 8 is substantially identical to Section II (4) of the 8/27/01 Office action in the instant application. Applicants have already fully responded to the issues raised in Example 8 in their 1/28/02 Response. The Examiner does not indicate that he has considered applicants’ response to the issues raised in Example 8. In Example 8, the Examiner asserts that it is applicants’ position that applicants’ claimed/disclosed technology is not “correlated/analogous” to Teletext technology. The Examiner, however, fails to provide any details regarding his position that “conventional Teletext systems” generally are correlated or similar to applicants’ claimed technology. Indeed, such generalized “correlations” or “analogies” are wholly irrelevant to the issue of whether or not applicants’ claims are patentable. Applicants’ position is that none of the cited references, related to Teletext or otherwise, alone or in combination, teach the methods and apparatus claimed by applicants. Applicants further distinguish the



currently pending claims from so-called “conventional Teletext systems/technology” below.

The Examiner further argues that applicants have indicated it is their belief that the scope of many of their pending claims encompasses the “Weather Star” system/receiver technology. First, the question of whether or not a particular system would be covered by a pending claim is wholly irrelevant to the examination of the instant claims, unless such system is prior art. The Examiner has not established that the Weather Star system is prior art. Second, although the Examiner vaguely refers to applicants’ “pending amended claims,” he makes no reference to a specific application or a specific claim. Due to the Examiner’s broad treatment of these issues, applicants cannot further respond in any meaningful manner to the issues raised in Example 8.

#### **Example 9**

Example 9 is substantially identical to Section II (5) of the 8/27/01 Office action in the instant application. In Example 9, the Examiner discusses the issue of whether “digital television signals/programming” was well known in the relevant art at the time that applicants filed their specifications. In their 1/28/02 Response, applicants fully addressed the Examiner’s rejections under § 112, second paragraph, of claims with limitations of “digital television,” and applicants maintain their previously stated position regarding the Schwartz et al. reference. None of applicants’ currently pending amended claims recite the limitation “digital television.” Further, only one claim, claim 63, recites the term “digital,” in the context of the communication of a video apparatus with a remote data source “via a digital information channel.” Applicants do not use the term “digital” in claim 63 in a manner believed to be objectionable by the Examiner. Accordingly, the issues raised in Example 9 are moot. Applicants note that there are no rejections of or objections to any of applicants pending claims based on the issues raised in Example 9, and applicants reserve the right to further respond to the issues raised in

Example 9 if any of these assertions are relied on to object to or reject any claim in the future.

#### **Example 10**

Example 10 is substantially identical to Section II (6) of the 8/27/01 Office action in the instant application. Applicants have already fully responded to the issues raised in Example 10 in their 1/28/02 Response. The Examiner does not indicate that he has considered applicants' response to the issues raised in Example 10.

In Example 10, the Examiner discusses two references issued to Zaboklicki: DE 2,914,981 and GB#2,016,874. Despite the Examiner's characterization of applicants' arguments regarding these references, applicants continue to maintain that neither Zaboklicki reference anticipates or renders obvious any of applicants' pending claims. Applicants will continue to address in detail any rejection under § 102 or § 103 in which a Zaboklicki reference is applied.

#### **Examples 11 and 12**

Examples 11 and 12 are substantially identical to sections of Section II (7) of the 8/27/01 Office action and Section I (N) of the 7/17/02 Office action, respectively. Applicants have already fully responded to the "programming" issues raised in Examples 11 and 12 in their 1/28/02 Response and their Response to Interview Summary. In addition to applicants' prior responses to the "programming" issues, applicants further address this issue in detail above. *See also* Declaration of Dr. Ligler, ¶¶ 41-44.

#### **Example 13**

Example 13 is substantially identical to Section II (8) of the 8/27/01 Office action in the instant application. In Example 13, the Examiner discusses whether or not radio and television arts represent non-analogous arts. The Examiner states that applicants have previously asserted that the radio and television arts are non-analogous arts. The Examiner's assertions in Example 13 do not form the bases for any rejection of or

objection to any specific claim pending in the instant application. To the extent necessary, applicants will further address the issues raised by the Examiner in Example 13 if and when such issues are ever raised in the context of a rejection of or objection to a specific pending claim.

#### **Example 14**

Example 14, discussing the “simultaneous and sequential” claim recitation, is substantially identical to Section II (9) of the 8/27/01 Office action in the instant application. Applicants have already fully responded to the issues raised in Example 14 in their 1/28/02 Response. The Examiner does not indicate that he has considered applicants’ response to the issues raised in Example 14. Further, the Examiner’s assertions in Example 14 do not form the bases for any rejection of or objection to any specific claim pending in the instant application.

#### **Examples 15 and 16**

Examples 15 and 16 are substantially identical to Section I (P) and (Q), respectively, of the 7/17/02 Office action. Applicants have already fully responded to the “programming” issue raised by the Examiner in their 1/28/02 Response and their Response to Interview Summary. In addition to applicants’ prior responses to the “programming” issues, applicants further address this issue in detail above. *See also* Declaration of Dr. Ligler, ¶¶ 41-44.

#### **Examples 17, 18, 23, 24, 25, and 26**

Examples 17, 18, 23, 24, 25, and 26 are substantially identical to Sections II (10), (11), (15), (16), (17), and (18), respectively, of the 8/27/01 Office action in the instant application. Examples 17, 18, 23, 24, 25, and 26 discuss various issues related to applicants’ ability to obtain a priority date based on their 1981 specification and the proper legal test to be applied when analyzing an applicant’s ability to obtain a priority date under § 120. Applicants have already fully responded to the issues raised in

Examples 17, 18, 23, 24, 25, and 26 in detail in their 1/28/02 Response and their Response to Interview Summary. The Examiner does not indicate that he has considered applicants' response to the issues raised in Example 17, 18, 23, 24, 25, and 26. In addition to applicants' prior response to the issues raised in 17, 18, 23, 24, 25, and 26, applicants further address those issues in detail above.

#### **Example 19**

In Example 19, the Examiner asserts that applicants' have not demonstrated that their pending claims are supported by "common subject matter." Applicants have already fully responded to the "common subject matter" issue raised in Example 19 in their 1/28/02 Response and their Response to Interview Summary. In addition to applicants' prior responses to the "common subject matter" issue, applicants further address this issue in detail above. Applicants further note that the allegation that applicants support claim 123 with the Wall Street Week example from the 1981 specification and with the Super Discount Supermarket example from the 1987 specification, fails to take into account applicants' narrative summaries for claim 123 submitted by applicants in their 1/28/02 Response. In their narrative summary of how claim 123 is supported under § 112, first paragraph, by both specifications, applicants rely only on the Wall Street Week example disclosed in both specifications. In any event, applicants have cancelled claim 123, therefore the issue is moot.

#### **Example 20**

Example 20 is substantially identical to Section I (I) of the 7/17/02 Office action, which applicants have responded to above.

#### **Example 21**

In Example 21, the Examiner describes and compares the technology disclosed by applicants in their 1981 and 1987 specifications and asserts that the technology disclosed in applicants' two specifications is "vastly different." While it is true that the 1987

application includes many enhancements and improvements, applicants maintain that the subject matter disclosed in their 1981 application is also disclosed in the 1987 application. Applicants have further addressed the issues raised in Example 21 in greater detail above.

#### **Example 22**

Example 22, regarding applicants' alleged inconsistent use of terminology, is substantially identical to Section II (14) of the 8/27/01 Office action in the instant application. Applicants have already fully responded to the issues raised in Example 22 in their 1/28/02 Response. The Examiner does not indicate that he has considered applicants' response to the issues raised in Example 22. In addition to applicants' prior response to the issues raised in Example 22, applicants further address these issues above.

#### **Example 27**

Example 27 is substantially identical to Section II (19) of the 8/27/01 Office action in the instant application. In Example 27, the Examiner asserts that certain structures recited in some of applicants' claims (namely, a receiver, a signal detector, a processor, and an output device) are also "found within a conventional CPU/MP/computer implemented Teletext" receiver. Office action, p. 92. The example is not discussed in the context of any of the claims pending in the instant application and the Examiner does not reject any of the pending claims based on the arguments made in Example 27. If and when the Examiner makes rejections of specific pending claims on the basis of issues raised in Example 27, applicants will further respond to such rejections. Applicants further respond above to the Examiner's assertion that applicants' "'SPAM' is, for all intents and purposes, synonymous with conventional 'Extended Teletext.'" *Id.*

### **Example 28**

Example 28, addressing applicants' disclosure of "interactive" features at receiver stations, is substantially identical to Section II (20) of the 8/27/01 Office action in the instant application. Applicants have already fully responded to the issues raised in Example 28 in their 1/28/02 Response. In Example 28, the Examiner questions applicants' written description support for the recitation "interactive ultimate receiver station" in claim 56. None of applicants pending claims includes the limitation "interactive." Applicants maintain that both the 1981 and 1987 specifications unquestionably disclose "interactive receiver stations." *See, e.g.*, 1981 Specification col. 20, ll. 23-27, and "Local Input" in Figure 6D; 1987 Specification, p. 288, ll. 1-20.

### **Example 29**

Example 29, discussing limitations allegedly directed to combining images through "replacing" portions of the images, is substantially identical to Section II (21) of the 8/27/01 Office action in the instant application. Applicants have already fully responded to the issues raised in Example 29 in their 1/28/02 Response. The Examiner does not indicate that he has considered applicants' response to the issues raised in Example 29. In addition to applicants' prior response to the issues raised in Example 29, applicants further address the "additively mixing vs. replacing" issue below.

### **Example 30**

In Example 30, the Examiner discusses the publication date of an article/reference by Gunn et al. Applicants acknowledge that the Gunn reference refers to a conference in London that took place from March 26-28, 1980. But this information alone does not qualify the reference as prior art (i.e., it was unclear when the paper was published). However, since the mailing of the 7/17/02 Office action, applicants received a copy of the Gunn reference that bears a Massachusetts Institute of Technology ("MIT") Library received stamp dated December 4, 1980. The Examiner also alleges in Example 30 that

applicants have previously neglected to provide the Office with information regarding the publication dates of many references. Applicants have diligently supplied the Office with references as they have become known to applicants. In some instances, dates were not provided with certain references, so applicants were not able to provide the Office with dates for each and every reference identified on some of applicants' Information Disclosure Statements.

**C. Response to Rejections Under Section 112, Second Paragraph.**

Section V of the Office action rejects claims 56-74, 76, 80-82, 84-87, 89-91, 116-118, 120-122, 162-170 and 179-182 as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. The cancellation of claims 59, 64, 76, 82, 86, 116-118, 120-122, 162-170, 179, 181 and 182 renders this rejection moot with respect to these claims. Parts 3, 5, and 6 of Section V are rendered moot as these parts only address cancelled claims 123, 167, 171, 175, and 179. Applicants respectfully submit that claims 56-58, 60-63, 65-74, 80, 81, 84, 85, 87, and 89-91 in their present form meet the requirements of the second paragraph of 35 U.S.C. § 112 for the reason set forth below. Accordingly, applicants request that this rejection of these claims be withdrawn.

**1. Clarification Of Claim 58**

In Section V (1) of the Office action, clarification of claim 58 is requested. It is asserted that the reference to said step of programming in claim 58 is indefinite because it not clear to which step of programming claim 58 refers. Claim 58 is amended to depend directly from claim 56 and to set forth the step of programming the video apparatus to perform the step of displaying. Accordingly the antecedent for said step of programming has been unambiguously added to claim 58. Claim 58 as amended clearly defines the

subject matter regarded as the invention and, accordingly, meets the requirements of the second paragraph of 35 U.S.C. § 112.

## **2. Response To Objection To “Locally Generated”**

In Section V (2), it is asserted that the term “locally generated” is indefinite as used in claims 56, 80, 84, 116, 162, 167, and 179 and the claims that depend therefrom. It is asserted that applicants arguments in response to prior Office actions are inconsistent and render the term indefinite. Applicants disagree.

Applicants have consistently argued that a locally generated image is different from a television or teletext image that is generated wholly by processing an incoming signal received from a remote source. In the Office action, it is asserted that applicants made contrary arguments in their Amendment filed January 28, 2002, with respect to a rejection of claim 179 under the first paragraph of 35 U.S.C. § 112. Applicants’ 1/28/02 argument does not render the term “locally generated” indefinite for at least two reasons.

Claim 179 is now cancelled and the remaining independent claims have been amended to set forth that the locally generated image is based on user specific data that is specific to a user of the video apparatus. Applicants assert that this amendment clarifies the distinction between the claimed locally generated image and images based solely on remotely received data such as teletext. Accordingly, the claim as amended includes no discrepancies with regard to the meaning of the term “locally generated.”

Further, applicants’ 1/28/02 arguments are consistent with the argument that a locally generated image is not an image based merely on teletext data. In the Office action, it is asserted that applicants argued with respect to claim 179 that “locally generated” images “encompass any and all video signals simply by the fact that any and all video signals must be ‘locally processed’ by the receiver side display circuitry in order to be converted into the ‘locally generated’ image that is actually displayed and viewed on the display screen.” Office action, p. 96. Applicants note that the portion of the



second completed full screen image set forth in claim 179 was locally generated based on resident data at the receiver station. Applicants never asserted that the second full screen image should be considered locally generated merely because it was converted into an image that was displayed and viewed on the display screen. To the contrary, the 1/28/02 amendment to claim 179 set forth that a portion of the locally generated second full-screen video graphic image is based on user specific data stored at the receiver station. It is this reliance on resident user specific data that makes the image “locally generated.” Accordingly, the term “locally generated” is not rendered indefinite by any inconsistent arguments presented by applicants during the prosecution of this application. In any event, the remaining pending claims do not use the “portion” language that applicants believe was the cause of the Examiner’s concern.

Applicants submit that claims 56, 80, and 84, which include the term “locally generated,” are definite for the above reasons. The cancellation of claims 116, 162, 167, and 179 renders this rejection moot with respect to these claims. Accordingly, applicants respectfully submit that claims 56, 80, and 84 meet the requirements of the second paragraph of 35 U.S.C. § 112.

### **3. Antecedent Basis For Organizing**

Section V (4) asserts that the term “said organizing” as recited in claim 84, 123, and 162 lacks antecedent basis. The cancellation of claims 123 and 162 renders this rejection moot with respect to these claims. Claim 84 is amended to provide clear antecedent basis for the amended recitation of “said organizing to provide said at least one organized signal.” Applicants note that the information of the first discrete signal is organized with the information of the second discrete signal to provide at least one organized signal. Applicants respectfully submit that claim 84 as amended provides antecedent basis for “said organizing.”

#### **4. Claims Directed To Operation Of Transmitter Stations Are Definite**

In Section V (7), claims 80-87, 110-114, 116-118, 120-127, 129, 140, 141, 162-166 and 171-176 are asserted to be confusing and indefinite. The cancellation of claims 82, 86, 110-114, 116-118, 120-127, 129, 140, 141, 162-166 and 171-176 renders this rejection of these claims moot. Two related reasons are given as reasons why these claims are indefinite.

One reason these claims are asserted to be indefinite is because “they appear to be ‘incomplete’ in that the few ‘active steps of manipulation’ that are positively recited by the claims appears to be incapable of performing the methods alleged by their preambles.” Office action, p. 97. Applicants respectfully submit that claims 80 and 84 are capable of performing the methods set forth in their preambles as amended. The preambles of independent claims 80 and 84 are amended to recite a “method of controlling a video presentation at at least one receiver station.” Claims 80 and 84 set forth signals that have a defined effect at the receiver station. The transmission of these signals *does* control a video presentation at a receiver station as set forth in the preambles of independent claims 80 and 84 as amended.

A second reason these claims are deemed indefinite is because they “include excessive numbers of recitations which imply that the recited processes includes/requires many ‘active steps of manipulation’ which are not positively recited in the claims.” Office action, p. 97. Claims 80 and 84 are directed to methods including steps performed at transmitter stations to control functions of receiver stations. In claim 80 a control signal and a signal including video and an instruct signal are transmitted from an origination station to a remote intermediate station. The instruct signal is defined as having a particular function at a receiver station. The control signal is defined as having a particular function at the remote intermediate transmitter station. “There is nothing inherently wrong with defining some part of an invention in functional terms.” M.P.E.P.

§ 2173.05(g). The claims do not imply that the methods include steps that are not recited, as asserted by the Examiner. To the contrary, claim 80 expressly sets forth steps of transmitting signals. Claim 80 further expressly sets forth the specific properties of the signals transmitted in functional terms. Claim 84 also sets forth receiving and transmitting signals that have defined properties set forth in functional terms. Applicants respectfully submit that the form of claims 80 and 84 is proper for the reasons set forth in M.P.E.P. § 2173.05(g).

In Section V (7), it is noted: “These section 112-2 issues, out of convenience, have been more fully addressed/developed within ‘SECTION VI’ of this Office action.” Office action, p. 98. In Section VI (12 & 13), it is asserted that a number of recitations from claims 80 and 84 suggest that the claimed methods includes steps not positively recited in the claims. For example, claim 80 sets forth an instruct signal which is operative at a receiver station to instruct the receiver station to at least one of generate and output a locally generated portion of a video presentation. This is a perfectly permissible recitation of the properties of the instruct signal set forth in functional terms. However, three clauses of this recitation are listed in Section VI (12 & 13) as suggesting further steps: the recitations of “is operative,” “to at least one of generate and output” and “locally generated.” To the contrary, the recitations of “is operative” and “to at least one of generate and output” clearly set forth the function of the instruct signal. The recitation of “locally generated” modifies the portion of the video presentation which is the object of the function of the instruct signal. Applicants respectfully submit that the instruct signal set forth in claim 80 is properly set forth in functional terms. Section VI (12) (II) includes similar conclusions regarding the recitation of the control signal in claim 80. Section VI (13) (II) includes similar conclusions regarding the recitation of the discrete signals and the organized signal set forth in claim 84. Applicants respectfully submit that these signals are also properly set forth in terms of their functions for the same reasons.

Applicants respectfully submit that claims 80 and 84 as amended, which set forth methods of controlling a video presentation at least one receiver station, distinctly set forth the steps of the claimed methods. Accordingly, claims 80 and 84 meet the requirements of the second paragraph of 35 U.S.C. § 112.

**D. Response To Rejections Under Section 112, First Paragraph**

In Section VI of the Office action, the Examiner rejects all of applicants' claims under § 112, first paragraph, as containing subject matter which is not adequately described in the specification. In Section VI (1), the Examiner argues that with respect to claims 93, 167, 171, 175, and 179 there is insufficient support for claim recitations "which indicate[] that a non-additive mixing process was used to combine" images in the claimed video presentations. Office action, p. 100. In applicants' Response filed on January 28, 2002, applicants asserted that their claims did not contain limitations of a specific method of combining images. In response to applicants' assertion, the Examiner argues that the recitations whereby one image "replacing" a portion of another image, or whereby only portions of two full screen images are displayed, inherently require a non-additive mixing process.

Applicants' maintain that both specifications disclose the generation of a video image whereby a portion of one image is replaced by another image. However, as previously stated, applicants do not intend to claim a particular method for combining images that result in the recited video presentations. Applicants have amended the relevant claims, for among other reasons, to clarify applicants' position on this issue. Amended claim 93 now recites in relevant part "outputting said video presentation to said user, said video presentation comprising, firstly, a video image and, secondly, a coordinated display using said generated image and said video image." Accordingly, amended claim 93 does not claim or indicate, either expressly or inherently, that a non-additive mixing process must be used to produce the coordinated display using the two

images. Applicants note that they have cancelled claims 167, 171, 175, and 179, and therefore the issue is moot with respect to those cancelled claims.

In Section VI (2), the Examiner argues that there is insufficient support for applicants' recitations (in claims 123, 171, 84, 93, 110, 116, 162, 167, 175, 179, etc.) directed to discrete signals carrying "partial" or "portions of" information that is assembled at receiver stations. In support of his argument, the Examiner asserts that "there is no evidence in the originally filed 1987 instant disclosure to show that the 'SPAM' packets which controlled the generation and display of the 'Wall Street Week' graphic overlay were conveyed [by/via] the plurality of 'discrete signals' now being claimed." Office action, p. 104. The Examiner's argument is without merit, and, further, the issue is moot with respect to the claims that applicants have cancelled.

Contrary to the Examiner's assertions, it is abundantly clear that the disclosed signal word and signal unit definitions are applicable to the SPAM messaging protocol disclosed in the 1987 specification. The SPAM message streams disclosed in the 1987 specification contain instruction signals which are comprised of signal words. *See, e.g.*, the end of file signal in Figure 2I and the discussion of Figure 2I on pages 65-66. In both specifications "signal words" are defined to be "one full discrete appearance of a signal." As applicants have already stated, the use of "signal word" throughout the 1987 specification is consistent with its definition. In both specifications, signals words are disclosed as being different sizes. Regardless of the size of the signal words being transmitted, they are disclosed as being discrete signals. Accordingly, a person of ordinary skill in the art would understand that, like the 1981 specification, the signals transmitted in SPAM messages disclosed in the 1987 specification are transmitted as discrete signals. *See, e.g.*, 1987 specification, p. 14, ll. 22-25 ("In all cases, signals may convey information in discrete words, transmitted at separate times or in separate locations, that receiver apparatus must assemble in order to receive one complete instruction."); *see also* Declaration of Dr. Ligler, ¶ 47. The disclosure of signal words

and signal units in the 1987 specification (which is identical to the disclosure in 1981) is applicable to the end of file signals and the instruction signals which respectively cause the generation and output of the graphic overlays in the Wall Street Week example described in the 1987 specification. The Examiner's arguments that the signals transmitted in the 1987 specification's Wall Street Week example are not described as being transmitted as discrete signals simply overlooks this clear disclosure. Contrary to the Examiner's arguments, there is no reason why a person of ordinary skill in the art would not understand that applicants' definitions of signal words and signal units are applicable to the SPAM messaging protocol disclosed in the 1987 specification, including the signals transmitted in the 1987 Wall Street Week example. *See Declaration of Dr. Liger, ¶ 47.* Further, regardless of the Examiner's assertions on this point, all of applicants claims are sufficiently supported by both disclosures. *See Declaration of Dr. Liger, ¶¶ 47, 48, 50 and 53.*

In Section VI (3), the Examiner requests that applicants identify where each recited element of each claim is disclosed in the 1987 specification "in the same detail and in the same context" as such element is currently being claimed. Office action, p. 106. Applicants have submitted detailed charts and narrative explanations discussing how each recited element is disclosed in both specifications in such a way as to reasonably convey to one skilled in the art that they were in possession of the claimed invention at the time when each specification was filed. The Declaration submitted by Dr. George Liger also demonstrates how each element of the amended claims is disclosed in both specifications in a manner sufficient to comply with § 112, first paragraph. Further, the issue is moot with respect to those claims applicants have cancelled.

In Section VI (4), the Examiner alleges that applicants have failed to "provide a clean showing of section 112-1 support for claim 123." Office action, p. 107. Specifically, the Examiner questions why applicants identified support for claim 123 from the "Super Discount Supermarket" embodiment in their response dated 6/7/00, and

then identified support for claim 123 in the Wall Street Week embodiment in their response dated 1/28/02. First, applicants submit that there is no legal or factual principle which would prevent a given claim being supported by different embodiments. A claimed invention need not be limited to a particular disclosed embodiment and a claimed invention need not be supported by one and only one embodiment. In applicants' response dated 6/7/00, applicants identified written description support for claim 123 using both the Super Discount Supermarket and the Wall Street Week embodiments. Contrary to the Examiner's implication, in their 1/28/02 response applicants restricted their discussion of support for claim 123 to the Wall Street Week example in an attempt to clarify and simplify the issue. Finally, applicants note that the issue is moot as applicants have cancelled claim 123.

In Section VI (5) of the Office action, the Examiner describes his understanding of how the Wall Street Week example operates in the 1987 specification. Applicants note that the Examiner's discussion of the Wall Street Week example disclosed in the 1987 specification is incomplete. Applicants' disclosure of the Wall Street Week example in the 1987 specification speaks for itself. Finally, applicants note that in Section VI (5) of the Office action, the Examiner does not raise any questions or make any objections to or rejections of any of applicants' claims.

In Section VI (6) of the Office action, the Examiner asserts that claim 56 is not entitled to a 1981 priority date because applicants rely on the Wall Street Week example to support claim 56, yet the two Wall Street Week examples are "vastly different." Applicants have already addressed how any differences in the two Wall Street Week examples do not impact applicants' ability to comply with § 112 with respect to both specifications. The Declaration of Dr. Ligler further supports applicants' position that claim 56 is adequately supported by both specifications, and that any differences between the Wall Street examples in the two specifications do not bear on the issue of whether or

not applicants' amended claims are adequately supported by both specifications. *See, e.g., Declaration of Dr. Ligler, ¶¶ 40-54.*

The Examiner also asserts in Section VI (6) of the Office action that applicants do not have support for the "request" recitation in claim 56. The Examiner asserts that the 1987 specification "only indicates that the receiver station is caused to contacts/connect with the remote data source so as 'to cause' the remote data source to select and provide those closing prices which need to be updated." Office action, p. 110. Applicants maintain that both specifications disclose the communication of a request to a remote data source. The "query" disclosed in both specifications is unquestionably a "request." *See, e.g., 1981 Specification, col. 19, ll. 37-39; 1987 Specification, p. 449, ll. 13-33.* However, applicants have amended claim 56 to recite the more general step of "contacting a remote data source." Accordingly, the Examiner's rejection of claim 56 based on the "request" step is moot.

Parts 7, 8, and 10-14 of Section VII assert that it not clear where in the instant disclosure, as originally filed, disclosed elements of claims 57, 58, 60, 61, 80, 84, and 93. Applicants respectfully submit that the Declaration of Dr. Ligler filed herewith demonstrates that the instant specification does provide support for these claims as required by 35 U.S.C. § 112. Parts 12 and 13 further note that claims 80 and 84 include many functional recitations and do not perform the methods set forth by their preambles. Applicants fully addressed this issue above in connection with the Examiner's rejections under the second paragraph of 35 U.S.C. § 112. Parts 9, and 15-23 of Section VI are rendered moot by the cancellation of claims to which these parts of the Office action are directed.

Parts 7, 8, 10, and 11 of Section VI address claims 57, 58, 60, and 61, which depend from claim 56. Claim 57 is amended to alter which steps of claims 56 the recited step of programming addresses. Claim 58 is amended to depend from claim 56 and to set forth the step of programming the video apparatus to perform the step of displaying.



With regard to claims 57 and 58, applicants note that, as disclosed at page 449 of the instant specification, the microcomputer, 205, in a predetermined fashion contacts a remote data source and receives remotely originated data. A processor acting in a predetermined fashion is programmed to act. Also, as disclosed at page 21, microcomputer, 205, (a computer) is preprogrammed to respond in a predetermined fashion to instruction signals embedded in the programming transmission. At page 26, such an instruction signal instructs the microcomputer to overlay graphic information onto the received composite overlay. Claim 61 is amended to alter the list of items that the recited identifier may identify. In the specification, a program unit identification is processed and identifies a television program. A channel mark is processed and identifies a communications resource. An instruction signal that instructs microcomputer, 205, to overlay is processed and identifies the overlay to be output. Claims 57, 58, 60 and 61 are similarly supported by the 1981 specification. *See* Declaration of Dr. Ligler, ¶ 39, Tab F.

Section VI (12) addresses claim 80. It is asserted that it is not clear where the method having the two positively recited steps is described in the instant disclosure. Applicants submit that the Declaration of Dr. Ligler demonstrates where such support from both specifications is found. *See* Declaration of Dr. Ligler, ¶ 29.

Section VI (13) addresses claim 84. It is asserted that it is not clear where the method having the steps recited is described in the instant disclosure. Applicants submit that Declaration of Dr. Ligler demonstrates where support from both specifications is found at Tab F. It is further asserted that claim 84 is incomplete for the reasons similar those asserted against claim 80. Section VII (13) (III) asks applicants to point out where a number of recited features are described in the instant disclosure. The features listed in subparts A, B, E, and M have been amended or deleted from claim 84. Claim 84 is amended to set forth an organized signal. The instant specification includes support for the function of the organized signal and its provision from discrete signals. *See* Declaration of Dr. Ligler, ¶ 35. This support addresses the issues raised in subparts D, G,

J, and K. With regard to subparts C and L directed to “information,” the discrete signals, as supported by the specification, clearly include information. The “Wall Street Week” television program includes video as listed in subpart F. Both specifications provide support for a transmitter station that transfers video and discrete signals as listed in subparts H and I. *See* Declaration of Dr. Ligler, Tab F. The user specific data listed in part N is resident data used to generate the graph of the performance of the stock portfolio of the user. An example of such data is included at page 449 of the instant specification. Similar support is identified in the 1981 specification. *See* Declaration of Dr. Ligler, Tab F.

In Section VI (14), applicants are asked to point out where various listed features of claim 93 are found in the instant disclosure. Claim 93 is amended to delete the step of passing a processor instruction from or within a processor. Claim 93 is further amended to delete “to be replaced.” The features of claim 93 as amended are fully supported by the instant specification and the 1981 specification. *See* Declaration of Dr. Ligler, ¶¶ 34-35. Applicants note that the “Wall Street Week” television transmission is an information transmission. Applicants also note that the discrete signals in the specification and identified in the Declaration of Dr. Ligler include information.

#### **E. Response To Prior Art Rejection Of Claims**

As a initial matter, applicants note that the Examiner has been unable to uncover a single anticipatory reference for any claim. The Examiner does, however, make numerous rejections of applicants’ claims using various combinations of “references” under 35 U.S.C. § 103. Applicants note that at times, the Examiner relies on generalized teachings of unspecified “systems” instead of actual references. For the reasons discussed below, this is improper. In the few instances where the claims are rejected based on a single reference, the Examiner relies on § 103, not § 102, which further

demonstrates that no single reference teaches any of applicants' claims. Applicants address the prior art rejections in detail below.

### **1. Requirements Of Section 103**

To establish a *prima facie* case of obviousness under § 103, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art to modify the reference to combine the teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references combined) must teach or suggest all of the claim recitations. M.P.E.P. § 706.02(j) (8<sup>th</sup> ed. 2001). Further, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not based on applicants' disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

In order to support a § 103 rejection based on the modification of a single reference, the Examiner must provide specific evidence to show *why* one of ordinary skill would be motivated to modify the reference in such a way to incorporate all of the claimed elements. *See In re Kotzab*, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1316-17 (Fed. Cir. 2000) ("Even when obviousness is based on a single prior art reference, there must be a showing of a suggestion or motivation to modify the teachings of that reference.") (emphasis added). Broad conclusory statements concerning motivation to modify, standing alone, are not sufficient to support an obviousness rejection. *See In re Freed*, 425 F.2d 785, 787, 165 USPQ 570, 571-72 (C.C.P.A. 1970) (an obviousness rejection must be based on facts, "cold hard facts"); *In re Kotzab*, 217 F.3d at 1370, 55 USPQ2d at 1317 ("Broad, conclusory statements standing alone are not 'evidence.'"). Accordingly, a statement that a modification would be an "obvious design choice," without factual support, is insufficient as a matter of law. *In re Dembiczak*, 175 F.3d 994, 50 USPQ2d 1614 (Fed. Cir. 1999), *abrogated on other grounds by In re Gartside*,

203 F.3d 1305, 53 USPQ2d 1769 (Fed. Cir. 2000). Finally, as the absence of a suggestion to modify a reference is dispositive in an obviousness determination, a rejection which fails to provide specific evidence as to *why* one of ordinary skill would be motivated to modify the relevant reference is insupportable, as a matter of law. *See Gambro Lundia AB v. Baxter Healthcare Corp.*, 110 F.3d 1573, 42 USPQ2d 1378 (Fed. Cir. 1997).

In order to support a § 103 rejection based on a combination of references, the Examiner must provide a sufficient motivation for making the relevant combinations. *See* M.P.E.P. §§ 2142 and 2143.01; *see also In re Rouffet*, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998) (“When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references.”). It is well-settled that an Examiner can “satisfy [the burden under 35 U.S.C. § 103 to establish a *prima facie* case of obviousness] only by showing some *objective teaching* in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references.” *In re Fine*, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) (emphasis added); *see also In re Lee*, 277 F.3d 1338, 1344, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002) (“‘deficiencies of the cited references cannot be remedied by the Board’s general conclusions about what is ‘basic knowledge’ or ‘common sense’”). As with rejections based on the modification of a single reference, “[b]road conclusory statements regarding the teaching of multiple references, standing alone, are not ‘evidence [of a motivation to combine]’” and thus do not support rejections based on combining references. *In re Dembiczak*, 175 F.3d at 999, 50 USPQ2d at 1617. Without objective evidence of a motivation to combine, the obviousness rejection is the “essence of hindsight” reconstruction, the very “syndrome” that the requirement for such evidence is designed to combat, and without which the obvious rejection is insufficient as a matter of law. *Id.* at 999, 50 USPQ2d at 1617-18.

As set forth in greater detail below, the Examiner has failed to follow these requirements when making the § 103 rejections of the claims of the instant application. For this reason alone, the § 103 rejections should be withdrawn.

## **2. Response To Section VII Of The Office Action**

Section VII of the Office action contains no rejections of or objections to any of applicants' claims. Thus, Section VII is not directly relevant to the patentability of applicants' claims. Accordingly, no response by applicants is required by 37 C.F.R. § 1.111. Nonetheless for completeness and to clarify the record, applicants provide the following comments regarding the assertions made in Section VII. Applicants reserve the right to further respond if any of these assertions are relied on to object to or reject any claim in the future.

Section VII initially asserts that applicants "not only impose[] an unrealistically low level of skill into section 102 and 103 issues, but applicant effectively places a heavy burden on the examiner to provide an education in what was already well known." Office action, p. 151. The Examiner then sets forth what *he maintains* is the known operation of teletext as one of ordinary skill in the art would have understood it. It is then asserted that the signaling structure set forth in applicants' 1987 specification "comprised little more than applicants' own version of conventional packetized Teletext data." Office action, p. 154. Applicants respectfully submit that such disparaging remarks are both unnecessary and improper. Whether or not the Examiner's understanding of teletext bears any resemblance to applicants' disclosed systems is irrelevant. What matters is whether or not *actual prior art* under 35 U.S.C. § 102 may be properly applied to applicants' *claimed inventions*. Applicants maintain that there are substantial elements set forth in the pending claims that are absent from the *actual prior art* for the reasons set forth below in response to Section VIII of the Office action. However, applicants note

the following observations regarding the general argument that applicants signaling structure is little more than teletext.

First, the Examiner expressly states that he is not saying that applicants' own implementation of a signaling structure is necessarily unpatentable because the Examiner may consider it a variant of teletext systems that distribute data in television signals. Office action, p. 155. Applicants maintain that many elements of their claimed invention are not found in any prior descriptions of teletext based systems. For example, the prior teletext systems fail to contemplate control of the combination of locally generated images with television images so television content may be tailored to a specific user at a receiver station as set forth in the instant claims.

Second, the thrust of the argument in Section VII is that the steps of manipulating and organizing discrete signals as set forth in applicants' claims do not distinguish the claimed invention from the prior art. Applicants maintain that there are novel features of manipulating and organizing discrete signals disclosed in the 1981 and 1987 specifications. However, many of applicants' claims do not rely on or claim these novel features. Each of the instant claims is distinguishable over the applied art for reasons not specifically related to how discrete signals are organized. In other words, the function of the signals that control locally generated images based on user specific information is not contemplated by prior teletext type systems.

Third, the description of teletext relied upon in Section VII is the Examiner's own description, which was written specifically to provide a basis for rejecting applicants' claims. The Examiner's description of teletext is not in itself prior art. Section VII makes no reference to any prior art teletext references. Rather, Section VII refers to Appendix B of the Office action, which is yet another description of teletext written by the Examiner. Appendix B in turn relies primarily on "the publication contained within 'Appendix A' of this Office action." Office action, p. 239.

Appendix A is titled [“standardized” Teletext (exemplified)] and contains what appears to be a specification for British teletext. Applicants were made aware of the document attached as Appendix A in connection with litigation involving a related patent and, thus, provided it to the Office. The specification is apparently an attachment to a Petition for Rulemaking of the United Kingdom Teletext Industry Group submitted to the Federal Communications Commission on March 18, 1981. There is no evidence of record to establish that the Appendix A document was publicly accessible in a manner that would qualify the document as a printed publication under 35 U.S.C. § 102. If the Examiner considers the document contained in Appendix A to be prior art, then applicants request that the Examiner explain how the document qualifies as prior art. For example, is it asserted to be a printed publication under 35 U.S.C. § 102(a) or (b)? Is it evidence of prior public use under 35 U.S.C. § 102(b)? Applicants note that the Examiner has presented no evidence that Appendix A was sufficiently accessible to the public to qualify as a “printed publication” under § 102. *See, e.g.*, M.P.E.P. § 2128.01 (“While distribution to Government agencies and personnel alone may not constitute publication . . . distribution to commercial companies without restriction on use clearly does.” quoting *Garret Corp. v. United States*, 422 F.2d 874, 878, 164 USPQ 521, 524 (Ct. Cl. 1970)). Applicants also note that prior use in the U.K. does not qualify as prior art under 35 U.S.C. § 102(b). Applicants are entitled to know the specific basis for the Examiner’s view that the Appendix A document is prior art in order to have a fair and reasonable opportunity to respond. In the absence of any such explanation by the Examiner, applicants submit that the Appendix A document is not prior art. And of course, the Examiner’s characterizations of the Appendix A document, contained in Section VII and Appendix B, also do not qualify as prior art.

Applicants wish to respectfully note that they will not acquiesce in the Examiner’s apparent position that “standardized teletext” qualifies as prior art. The Examiner must apply actual prior art under 35 U.S.C. § 102 to the specific claims of the instant

application. The Appendix A document has not been established as an available prior art reference. If the Examiner's understanding of "standardized teletext" is based on some assemblage of teletext-based references which qualify as prior art, then a proper claim rejection would be based on the specific references in any such assemblage under 35 U.S.C. § 103. And *each* reference in the assemblage must qualify as prior art under 35 U.S.C. § 102. Of course, applicants will respond to any rejection based on multiple references appropriately. To the extent that the Examiner has taken "official notice" of so called "standardized teletext," applicants hereby request that the Examiner provide specific references to justify that assertion, as required by M.P.E.P. § 2144.03.

Fourth, the Examiners' argument appears to be based on the assumption that applicants' currently pending claims are not entitled to the November 3, 1981 priority date. Applicants maintain for the reasons set forth in detail above that all of the pending claims in the instant application are entitled the benefit of the 1981 priority date. Although not entirely clear from the Office action, the Examiner's description of teletext appears to be the Examiner's understanding of the state of the art prior only to applicants' 1987 priority date. Accordingly, the Examiner's discussion of teletext is of limited value, not only because the Examiner's discussion is not actual prior art, and not only because the claims are distinguishable from the cited teletext references, but also because the instant claims are entitled to the 1981 priority date that may predate the features of teletext described by the Examiner.

For at least these reasons, applicants respectfully submit that Section VII fails to establish any basis for any rejection of the pending claims. It should therefore be withdrawn in its entirety.

### **3. Summary Of The Prior Art Rejections**

Section VIII of the Office action includes 20 numbered parts (numbered 1-19, with the separate rejections beginning on page 119 and page 200 of the Office action both



being numbered 18) each applying a single reference under 35 U.S.C. § 103(a) or a combination of references under 35 U.S.C. § 103(a). Sixteen references are applied in 13 different combinations. In addition, part 6 includes a “prior art” rejection of claim 80 that is not based on any particular reference.

Claims 110, 116, 117, 123, 162, 167, 171, and 179 are cancelled. Accordingly, the following parts of Section VIII are rendered moot:

Part 12, rejecting claim 110 as being unpatentable over German publication number 2904981 to Zaboklicki (Zaboklicki);

Part 13, rejecting claims 116 and 117 as being unpatentable over British publication number 2 155 283 to Baker;

Part 14, rejecting claim 162 as being unpatentable over Zaboklicki;

Part 15, rejecting claims 110 and 162 as being unpatentable over Zaboklicki in view of U.S. Patent 4,602,279 to Freeman;

Part 16, rejecting claim 179 as being unpatentable over U.S. Patent 4,034,990 to Baer in view of U.S. Patent 4,247,106 to Jeffers et al.; and

The second part 18, rejecting claim 179 as being unpatentable over “‘standard’ Teletext decoders, e.g. of the type illustrated in the figure of US Patent #3,982,065 to Barnaby et al.”

The rejections of claims 110, 123, 162, 167, 171, and 179 in parts 7, 17, and the first part 18 are rendered moot due to the cancellation of those claims.

Many of the applied references fall generally into one of two groups. The first group is art directed to teletext systems. The second group is art directed to game software. Applicants respectfully assert that all the pending claims are patentable over both groups of prior art.

Applicants respectfully submit that the generation of a local image using data specific to a user and outputting the local image with video is not suggested by the teletext prior art. An example of such local generation disclosed in both of applicants’

specifications is the generation of the graph of the performance of the user's stock portfolio and the subsequent output of the graph within the "Wall Street Week" television program. Applicants' maintain that this generation of an image is distinguishable from teletext because the claimed locally generated image is different from the images generated at other receivers because it generated based on user specific data. The pending independent claims have been amended to explicitly set forth that the generated image is based on data that is specific to the user. These amendments serve to clearly distinguish such user specific data from non-specific data resident in teletext decoders. The data in teletext decoders have no relationship to the user of the device. At best, such data may be specific to receiving device, if, for example, it were to include an address. However, such data in a teletext decoder is not based on information supplied by the user of the device and has no specific relationship to the user of the device. For at least this reason, the references directed to teletext fail to show or suggest a locally generated image based on user specific data as set forth by the instant claims.

Applicants further submit that the generation of a local image using resident data specific to user is also not suggested in the applied video game art. First, the downloading of game software in the applied art is not based on user specific data for the same reasons that teletext images are not. There is no user specific data used to download the games. At best there is a receiver address. Again, this address is not based on information supplied by the user nor does it have any specific relationship to the user. Second, the video output of the game is distinguishable from the generated image set forth in the claims. The only user data used to output the game video is user input required to play the game. This is different from automatically generating a customized image based on user specific data resident at a receiver. Independent claim 56, 84, 93, and 187 set forth that the user specific data is received or stored at the receiver and is

subsequently used for generating an image<sup>9</sup>. The user specific data, thus, cannot be user input used to control a video game in real time. For at least this reason, the applied references directed to downloaded video games fail to show or suggest a locally generated image based on stored user specific data as set forth by the pending claims.

Applicants have added claim 187 which corresponds to claim 93 with the exception that the outputting of the video presentation, rather than the generating of the image, is based on the organized signal. In both claims, an image is generated by processing a user specific subscriber datum and a coordinated display using the generated image is output. Applicants respectfully assert that claim 187 is patentable over the applied art for at least the reasons set forth herein with regard to claim 93.

Claims 62, 63, 65-74, 81, 85, 87, 89-91, 94, 95, 98, 100, 102, 103, and 106-109 are not rejected over the prior art. Applicants agree that these claims are not rendered unpatentable by the prior art. Accordingly, applicants do not further address the distinctions between these claims and the prior art herein. New claims 188-197, dependent from claim 187, correspond to claims 94, 95, 98, 100, 102, 103, and 106-109, dependent from claim 93. Applicants respectfully assert that new claims 188-197 are likewise patentable over the prior art.

Applicants respond to the prior art rejections in detail below.

#### **4. 35 U.S.C. § 103 (a) Rejection Based On Harden**

Parts 1 and 19 of Section VIII the Office action reject claims 56-61 under 35 U.S.C. § 103(a) as being unpatentable over the publication “Teletext/Viewdata LSI” by Brian Harden (Harden).

Claim 56 is directed to a method for presenting a video presentation including a remotely-transmitted image and a locally-generated image. The remotely-transmitted

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<sup>9</sup> The video game references include no disclosure of functions performed at an origination station and are not applied against the origination station method set forth by independent claim 80.

image comes from a remote video source. The locally-generated image is generated by processing remotely originated data received from a remote data source and user specific data. The remotely originated data is received based on contacting the remote data source. The user specific data is received and is specific to a user. The remotely-transmitted image and the locally-generated image are displayed simultaneously.

Specifically, claim 56 includes elements of executing processor instructions to process the remotely originated data and the user specific data in order to generate the locally generated image. The user specific data is received at the video apparatus and is specific to a user of the video apparatus. The locally generated image and the image received from a remote source are simultaneously displayed.

An example of the invention defined by claim 56 is the display of the user's stock portfolio in the "Wall Street Week" embodiment disclosed by both of applicants' priority specifications. In this example, remotely originated stock prices and the user specific stock portfolio data are processed to generate a graph of the user's portfolio performance. The graph is then displayed during the "Wall Street Week" television program.

Harden is a teletext type reference. The Harden article addresses a cost effective large scale integration (LSI) chipset for performing both teletext and viewdata functions. Harden does mention "the ability to display both text and picture at the same time. For such data as subtitles and newflashes a box is 'cut' in the television picture and the appropriate text inserted." Harden at 356. However, Harden does not suggest displaying personal data retrieved through a viewdata system and inset into television programming. Although the chipset can access both viewdata and teletext, there is no structure or suggestion included in Harden for integrating information requested by a user through a viewdata system with a television program.

As the rejection based on Harden is under Section 103, it is recognized that Harden does not identically disclose or describe applicants' claimed invention. The Office action fails to set forth the differences in the claims over Harden. The Office

action includes no explanation why one of ordinary skill in the art would have been motivated to modify Harden to arrive at the claimed subject matter. Accordingly, the Office action fails to establish a *prima facie* case of obviousness under 35 U.S.C. § 103. For this reason alone, the rejection under 35 U.S.C. § 103 should be withdrawn.

In addition, Harden fails to show or suggest receiving user specific data at the video apparatus as set forth by claim 56 as amended. Claim 56 is amended to set forth user specific data in place of locally supplied data. The bit map data of the character ROM of Harden is relied upon in the Office action to show locally supplied data. Teletext bitmap data is insufficient to show the user specific data as set forth in claim 56 as amended. First, the bitmap data is not received at the video apparatus, as is the user specific data of claim 56. Teletext bitmap data is typically stored in ROM, as noted in the Office action, as permanent information supplied with the teletext decoder. Claim 56 is amended to clearly set forth that the user specific data is received, such as when the user's portfolio is input into the apparatus. Second, bitmap data stored in a teletext generator is the same data that is stored in all teletext generators to define the image of each character. The bitmap data is not specific to the user of the video apparatus, but rather is common to many receivers. Claim 56 is amended to clearly set forth that the user specific data is specific to a user of the video image apparatus, such as a user's stock portfolio is specific to the user. Accordingly, teletext generators, such as included in Harden, do not receive user specific data as set forth by claim 56 as amended.

Also, Harden fails to show or suggest executing processor instructions to process the remotely originated data and the user specific data in order to generate a locally generated image. In the Office action, teletext data is relied upon to show remotely originated data and, as discussed above, bitmap data is relied upon to show user specific data. For the reasons discussed above, the bitmap data is not user specific data as set forth by claim 56 as amended. In addition, Harden fails to show or suggest executing processor instructions to process the remotely originated data. Claim 56 sets forth

executing processor instructions to process remotely originated data (*e.g.*, executing instructions that control how to generate a stock performance graph by processing stock price data). There are no equivalent processor instructions described in Harden.

Further, Harden fails to show or suggest simultaneously displaying the locally generated image and the image received from the remote video source. In the Office action, it is noted that Harden describes obtaining data by contacting a remote source using viewdata processing circuits. It is further noted that Harden describes a MIX mode to enable text characters to be inset into the TV picture. However, Harden notes that although the teletext processing circuits and viewdata processing circuits may advantageously be combined on a single chip, the two services are quite different. Harden at 353. Harden notes that the teletext system facilitates “live” transmissions of text data that everyone may receive simultaneously. *Id.* Harden specifically notes that subtitles and news flashes are good examples of this use of teletext. *Id.* Harden also notes that the viewdata connection is an individual connection and may thus be a personal connection and the data content may reflect this. *Id.* Harden does *not* suggest nor provide any structure for combining these different features of teletext and viewdata. Harden merely states that a feature of the video generator is the ability to display both text and pictures at the same time. Harden at 356. Harden specifically notes that for such data as *subtitles and newsflashes* (data previously described as good examples of teletext data) a box is ‘cut’ in the television picture and the appropriate text inserted. *Id.* There is no suggestion to simultaneously display text received by contacting a viewdata service with the television picture. Indeed, there is no suggestion of a television program that would be appropriate to display with viewdata text.

Applicants respectfully request that the rejection of claim 56 as being unpatentable over Harden under 35 U.S.C. §103(a) be withdrawn for at least the reasons set forth above.

In Section VIII (19) of the Office action, claims 57-61, dependent upon independent claim 56, are also rejected under 35 U.S.C. 103(a) as being unpatentable over Harden. The cancellation of claim 59 renders this rejection moot with respect to that particular claim. Applicants respectfully request that this rejection be withdrawn for the reasons set forth above with respect to claim 56. As discussed above, Harden fails to show or suggest every element of claim 56 and thus, *ipso facto*, Harden fails to render obvious dependent claims 57, 58, 60, and 61. If an independent claim is nonobvious under 35 U.S.C. § 103, then any claim depending therefrom is nonobvious. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Applicants respectfully request the withdrawal of this rejection of claims 57, 58, 60, and 61 for at least the above reasons.

Furthermore, claim 57 sets forth a further step of programming the video apparatus to perform any of the steps contacting, receiving the remotely originated data, and displaying. The Office action relies on the control device of Harden that is connected to the keyboard for receiving user input. Although, the control device is programmable to accept different keyboards, Harden includes no suggestion to program the control device to contact a viewdata source, to receive teletext data, nor to display viewdata with received video as set forth by claim 57.

Claim 58 is amended to set forth programming the video apparatus to perform the step of displaying. As discussed above with respect to claim 57, the control device of Harden is relied upon to show a computer. This control device is connected to a keyboard. Harden includes no suggestion to program the control device to perform a step of displaying as set forth in claim 58.

#### **5. 35 U.S.C. § 103 (a) Rejection Based On Poirier**

Section VIII (3) of the Office action rejects claim 56 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 4,533,943 issued to Alain Poirier (Poirier).

Poirier is a U.S. patent issued August 6, 1985, from a U.S. application filed July 6, 1983. Claim 56 is entitled to the benefit of the November 3, 1981 filing date of applicants' patent application no. 317,510 for the reasons discussed above. Accordingly, Poirier is not available as prior art against claim 56. Applicants respectfully request that this rejection be withdrawn for at least this reason. However, assuming *arguendo* that the application of Poirier as prior art is maintained, applicants distinguish the invention claimed in claim 56 from the teachings of Poirier below.

As discussed above with respect to Harden, claim 56 includes elements of executing processor instructions to process the remotely originated data and the user specific data in order to generate the locally generated image. The user specific data is received at the video apparatus and is specific to a user of the video apparatus. The locally generated image and the image received from a remote source are simultaneously displayed.

Poirier is directed to a videophone terminal connected to a picture bank through telephone and wide-band communication systems. The videophone initiates contact with the picture bank through the telephone system. An addressed data channel is then established over the wide-band connection. The telephone connection is then released. Video and videotext data may thus be transmitted over the channel on the wide-band connection from the picture bank to the videophone. The videotex may be superimposed on video through a combiner.

As the rejection based on Poirier is under § 103, it is recognized that Poirier does not identically disclose or describe applicants' claimed invention. The Office action fails to set forth the differences in the claims over Poirier. The Office action includes no explanation why one of ordinary skill in the art would have been motivated to modify Poirier to arrive at the claimed subject matter. Accordingly, the Office action fails to establish a *prima facie* case of obviousness under 35 U.S.C. § 103. For this reason alone, the Examiner's rejection should be withdrawn.



In addition, Poirier fails to show or suggest user specific data as set forth by claim 56. The videotex encoder of the picture bank of Poirier adds a heading to each data packet including a channel identifying word that is the same for all packets of the same digital channel. Poirier, col. 5, ll. 37-45. At the videophone, a control unit provides the address of the selected channel to a videotex decoder. Poirier, col. 6, ll. 3-24. In the Office action, this address is relied upon to show locally supplied data. Claim 56 is amended to clearly set forth that the user specific data is specific to a user of the video apparatus. The channel address of Poirier is merely the address of the digital channel selected to transmit video to the videophone. The channel address has no relationship to the user of the videophone: any channel will work for any particular user. Furthermore, claim 56 is amended to set forth contacting the remote data source after the step of receiving the user specific data. The channel address of Poirier cannot be received by the videophone prior to contacting the picture bank. For at least these reasons, Poirier fails to suggest receiving user specific data as set forth by claim 56.

Applicants respectfully request that the rejection of claim 56 under 35 U.S.C. §103(a) as being unpatentable over Poirier be withdrawn for at least the above reasons.

#### **6. 35 U.S.C. § 103 (a) Rejection Based On Oono.**

Parts 2, 8, and 10 of Section VIII of the Office action reject claims 56, 84 and 93 under 35 U.S.C. § 103(a) as being unpatentable based on Japanese published application no. 55-028691 listing Kenzou Oono et al. as inventors (Oono)(references to Oono refer to the English translation by FLS, Inc. provided by the Office and dated March 1997).

Oono is a video game software reference. Oono relates to a television receiver with a programmable processor. Software or picture data may be superimposed on a video signal and transmitted to a home. A telephone modem is described for establishing a connection to a broadcasting station. The receiver includes a receiver, a data pickup circuit, a microcomputer, video RAM, a switch, and a circuit in which the output of the

video RAM and external video are superimposed. In one mode of operation, Oono describes data to be superimposed. In this mode, data addressed to the receiver is stored in memory and written to the video RAM. The switch is set to input  $V_2$  to accept input from a circuit in which the picture from the video RAM and the video signal of an external signal are superimposed.

As the rejections based on Oono are under Section 103, it is recognized that Oono does not identically disclose or describe applicants' claimed invention. The Office action fails to set forth the differences in the claims over Oono. The Office action includes no explanation why one of ordinary skill in the art would have been motivated to modify Oono to arrive at the claimed subject matter. Accordingly, the Office action fails to establish a *prima facie* case of obviousness under 35 U.S.C. § 103. For this reason alone, the Examiner's rejection should be withdrawn. Additional reasons why Oono fails to teach or suggest applicants' claimed subject matter are provided below.

**a. Independent Claim 56**

As discussed above with respect to Harden, claim 56 includes elements of executing processor instructions to process the remotely originated data and the user specific data in order to generate the locally generated image. The user specific data is received at the video apparatus and is specific to a user of the video apparatus. The locally generated image and the image received from a remote source are simultaneously displayed.

Oono fails to show or suggest user specific data as set forth by claim 56. In the Office action, it is asserted that Oono describes processing received data with "locally supplied terminal address data" in order to locally generate a requested image which was then displayed as an overlay over received television programming. The terminal address of Oono does not have the properties of the user specific data set forth by claim 56 nor does it function as does the user specific data of claim 56. First, claim 56 is amended to

clearly set forth that the user specific data is specific to a user of the video apparatus. The terminal address of Oono is at most specific to the apparatus. The address has no relationship to the user of the apparatus: any particular address will work for any particular user. Thus, the terminal address of Oono is not specific to a user of the video apparatus as is the user specific data set forth by claim 56. Second, the method of claim 56 includes executing processor instructions to process remotely originated data and user specific data in order to generate a locally generated image. In Oono, data to be superimposed is stored in memory. Oono at 8. When the address is verified the data is decoded. *Id.* In the case of software data, it is sequentially stored into memory. *Id.* After the data is stored in memory, the data is written in a specified location in a refresh memory for output. *Id.* Accordingly, the terminal address of Oono is required only to decode and store the data. The terminal address is not processed to generate any video that is output when switching the switch to combined input V<sub>2</sub>. In summary, the terminal address of Oono is not specific to a user of the video apparatus and is not processed to output a combined image. For at least these reasons, Oono fails to show or suggest the method of claim 56.

Applicants respectfully request that the rejection of claim 56 under 35 U.S.C. §103(a) as being unpatentable based on Oono be withdrawn.

**b. Independent Claim 84.**

Claim 84 defines a method for a transmitter station to transmit a plurality of discrete signals that are organized at a receiver station into signals that have specified effects at the receiver station. In claim 84, video and two discrete signals are received and transmitted by the transmitter station. The discrete signals are for organizing into an organized signal. The organized signal is effective at the receiver station to generate or output a locally-generated image with the remotely-transmitted video. The locally-generated image is based on user specific data. The user specific data is stored at the

receiver station prior to providing the organized signal and is based on information supplied by a user of the receiver station.

In the Office action, is asserted that the addressed data of Oono is organized at the receiver. The terminal address is relied upon to show user specific data. Applicants maintain that the terminal address is not specific to the user of the Oono receiver. Further emphasizing this distinction, claim 84 is amended to set forth that the user specific data is based on information supplied by a user of the receiver station. An example of such user specific data is the stock price data that is based on a stock portfolio provided by a user of the receiver station. The terminal address of Oono is not based on any information supplied by a user of the receiver; it is rather merely an address that identifies the receiver. Accordingly, Oono fails to suggest an organized signal that instructs a receiver station to generate or output a locally generated image based on user specific data as set forth by claim 84.

Applicants respectfully request that the rejection of claim 84 under 35 U.S.C. §103(a) as being unpatentable over Oono be withdrawn.

**c. Independent Claim 93**

Claim 93 is directed to a method for a receiver station to receive discrete signals that are organized into a complete instruction with a specified effect. In claim 93, the receiver station receives, detects, and passes discrete signals found in an information transmission to a processor. The receiver station organizes the first discrete signal with the second discrete signal into an organized signal. The organized signal is effective to generate an image by processing user specific subscriber data. The user specific data is stored at the receiver station prior to the organizing of the organized signal and is based on information supplied by a user of the receiver station. The result is an outputted presentation of a video image and a coordinated display using the generated image and the video image.

Claim 93 is rejected for the same reasons that were set forth for claim 84 above. Claim 93 is amended, similarly to claim 84, to set forth that the user specific subscriber datum is based on information supplied by a user of the receiver station. No image is generated in Oono in response to an organized signal by processing a user specific subscriber datum that is based on information supplied by a user of the receiver. The terminal address of Oono is not based on information supplied by a user of the receiver. Furthermore in claim 93, an image is generated in response to the organized signal. No image is generated in Oono in response to the terminal address. Oono fails to suggest a user specific subscriber datum as set forth by claim 93 for at least this reason.

Applicants respectfully request that the rejection of claim 93 under 35 U.S.C. §103(a) as being unpatentable over Oono be withdrawn.

**7. 35 U.S.C. § 103 (a) Rejection Based On Seth-Smith**

Section VIII (7) of the Office action rejects claims 56, 84, 93, 110, 123, 162, 167, 171, and 179 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 4,890,321 issued to Nigel Seth-Smith et al. (Seth-Smith).

The cancellation of claims 110, 123, 162, 167, 171, and 179 renders this rejection moot with respect to these particular claims.

Seth-Smith is a U.S. patent issued December 26, 1989, from a U.S. application filed September 30, 1988, that is a continuation of Serial No. 883,310 filed July 8, 1986 and now abandoned. The rejected claims are entitled to the benefit of the November 3, 1981 filing date of applicants' patent application no. 317,510 for the reasons discussed above. Accordingly, Seth-Smith is not available as prior art against the rejected claims. Applicants respectfully request that this rejection be withdrawn for at least this reason. However, assuming *arguendo* that the application of Seth-Smith as prior art is maintained, applicants distinguish the invention claimed in claims 56, 84, and 93 from the teachings of Seth-Smith below.

Seth-Smith is a teletext type reference. Seth-Smith is directed to a subscription television system with the capability to direct individual text messages to individual subscribers. These text messages are heavily protected against improper receipt. Decoders of Seth-Smith use a key-of-the-month (KOM) that is varied once per month and a secret serial number which is permanently written into memory of the decoder. The KOM is used together with the secret serial number of each of the individual decoders to provide a decryption key which is unique for each decoder. The KOM is the same for all decoders. The secret serial number is stored in electrically erasable programmable read only memory (EEPROM) at manufacture of the device. The system permits specific billing information to be securely transmitted to individual subscribers. The system may also be used to transmit "pay-teletext" in which the user would select teletext information as desired programming which the user purchases.

As the rejections based on Seth-Smith are under § 103, it is recognized that Seth-Smith does not identically disclose or describe applicants' claimed invention. The Office action fails to set forth the differences in the claims over Seth-Smith. The Office action includes no explanation why one of ordinary skill in the art would have been motivated to modify Seth-Smith to arrive at the claimed subject matter. Accordingly, the Office action fails to establish a *prima facie* case of obviousness under 35 U.S.C. § 103. For this reason alone, the Examiner's rejection should be withdrawn. Additional reasons why Seth-Smith fails to teach or suggest applicants' claimed subject matter are provided below.

**a. Independent Claim 56**

Claim 56 includes elements of contacting a remote data source and receiving from the remote data source remotely originated data. Processor instructions are executed to process the remotely originated data and the user specific data in order to generate the locally generated image. The user specific data is received at the video apparatus and is

specific to a user of the video apparatus. The locally generated image and the image received from a remote source are simultaneously displayed.

Seth-Smith fails to show or suggest contacting a remote data source. In the Office action it is asserted that Seth-Smith discloses a request for authorization to enable a “pay-teletext” service is communicated (via the telephone system) to a remote data source (the broadcast transmitter). To the contrary, Seth-Smith teaches away from contacting the broadcast transmitter to obtain “pay-teletext.” Seth-Smith includes means permitting the user to communicate with the broadcaster. Seth-Smith, col. 7, ll. 16-18. However, Seth-Smith states: “Ordinarily, the user will only need to communicate with the broadcaster sporadically, for example, to request addition of a service, or pay a bill or the like.” Seth-Smith, col. 7, ll. 18-20. Such communication does not include specific requests for “pay-teletext.” The system of Seth-Smith, as used for “pay-teletext” “is limited as compared to an interactive database by the fact that the decoder is only permitted to display messages selected from those sent by the broadcaster; the messages sent by the broadcaster *are not transmitted responsive to specific requests from the decoder.*” Seth-Smith, col. 22, ll. 64-68, emphasis added. Accordingly, Seth-Smith does not suggest contacting a remote data source as set forth in claim 56. Indeed, it teaches away from this aspect of claim 56.

Seth-Smith also fails to show or suggest simultaneously displaying a locally generated image and an image received from a remote video source at a video output device, where user specific data is processed in order to generate the locally generated image. The teletext images of Seth-Smith are primarily related to subscription services, such as a page indicating billing status. There is no suggestion that such pages are displayed with remote video. Seth-Smith discloses that the teletext may be superimposed over whatever video is on the screen at the time for purposes such as closed-captioning. Seth-Smith, col. 19, ll. 42-56. Closed-captions, however, are not generated by processing user specific data. In the Office action, the “pay-teletext” images are relied upon as

locally generated images. Seth-Smith includes no suggestion that “pay-teletext” images are displayed with a video image.

In the Office action, the secret code unique to the decoder is relied upon to show user specific data. The secret code is supplied by the manufacturer. Seth-Smith, col. 24, ll. 46-49. That is, the secret serial number is permanently stored in the EEPROM at manufacture of the device. *Id.* The secret code is wholly independent of the user of the apparatus. In fact, the secret code is unknown by the user and cannot be read by the user. The device will work for any authorized user with the secret code supplied at manufacture. Claim 56, to the contrary, sets forth that in order to generate the locally generated image, user specific data specific to a user of the video apparatus is processed. Accordingly, the secret code of Seth-Smith cannot be relied upon to show user specific data as set forth by claim 56.

Applicants respectfully submit that for the above reasons, Seth-Smith fails to show or suggest executing processor instructions to process user specific data in order to generate a locally generated image and simultaneously displaying the locally generated image and an image received from a remote video source. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of amended independent claim 56 as unpatentable over Seth-Smith be withdrawn.

**b. Independent Claim 84**

Claim 84 defines a method for a transmitter station to transmit a plurality of discrete signals that are organized at a receiver station into signals that have specified effects at the receiver station. In claim 84, video and two discrete signals are received and transmitted by the transmitter station. The discrete signals are for organizing into an organized signal. The organized signal is effective at the receiver station to generate or output a locally-generated image with the remotely-transmitted video. The locally-generated image is based on user specific data. The user specific data is stored at the



receiver station prior to providing the organized signal and is based on information supplied by a user of the receiver station.

In the Office action, the discussion of claim 84 fails to address the user specific data set forth in claim 84. For the reason discussed above with respect to claim 56, the secret code unique to the decoder in Seth-Smith is not user specific data as set forth by claim 84. Amendments to claim 84 emphasize the user specific nature of the data that forms the basis for the locally generated image. Claim 84 is amended to set forth that the user specific data is based on information supplied by a user of the receiver station. The secret code of Seth-Smith, to the contrary, is permanently stored in the EEPROM at manufacture of the device. Seth-Smith, col. 24, ll. 46-49. The secret code is wholly independent of the user of the apparatus. In fact, the secret code is unknown by the user and cannot be read by the user. The device will work for any authorized user with the secret code supplied at manufacture. Accordingly, the secret code of Seth-Smith cannot show user specific data as set forth in claim 84. Nor can other billing data be relied upon to show user specific data because such data is not the basis of a locally generated image for display coordinated with video.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of amended independent claim 84 as unpatentable over Seth-Smith be withdrawn for at least the above reasons.

**c. Independent Claim 93**

Claim 93 is directed to a method for a receiver station to receive discrete signals that are organized into a complete instruction with a specified effect. In claim 93, the receiver station receives, detects, and passes discrete signals found in an information transmission to a processor. The receiver station organizes the first discrete signal with the second discrete signal into an organized signal. The organized signal is effective to generate an image by processing user specific subscriber data. The user specific data is

stored at the receiver station prior to the organizing of the organized signal and is based on information supplied by a user of the receiver station. The result is an outputted presentation of a video image and a coordinated display using the generated image and the video image.

In the Office action, the discussion of claim 93 fails to address the user specific subscriber datum set forth in claim 93. The amendments to claim 93 also emphasize the user specific nature of the datum that is processed to generate the image. Claim 93 is amended to set forth that the user specific subscriber datum is based on information supplied by a user of the receiver station. The secret code of Seth-Smith, to the contrary, is permanently stored in the EEPROM at manufacture of the device. Seth-Smith, col. 24, ll. 46-49. The secret code is wholly independent of the user of the apparatus. In fact, the secret code is unknown by the user and cannot be read by the user. The device will work for any authorized user with the secret code supplied at manufacture. Accordingly, the secret code of Seth-Smith cannot show the user specific subscriber datum set forth in claim 93. Nor can other billing data of Seth-Smith be relied upon to show a user specific subscriber datum because such data is not processed to generate an image that is output in a coordinated display with a video image.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of amended independent claim 93 as unpatentable over Seth-Smith be withdrawn.

**8. 35 U.S.C. § 103 (a) Rejection Based On Baer In View Of Jeffers.**

Section VIII (17) of the Office action rejects claims 84, 93, 110, 123, 162, 167, and 171 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 4,034,990 issued to Ralph H. Baer (Baer) in view of U.S. Patent 4,247,106 issued to Michael F. Jeffers et al. (Jeffers). Baer and Jeffers are video game software references.

Baer is directed to an apparatus for playing games on a television receiver. Video signals received by the Baer apparatus have a video background for the game and have

active player symbols that have recognizable characteristics allowing circuitry to extract them from the surrounding video signals so that they can be combined with other signals generated in the viewer's game circuits.

Jeffers is directed to a system to distribute game programs through cable television systems. At the head end an array of game-regulating programs are impressed onto an electronic distribution system, such as serially time division multiplexed onto a game delivery channel. The user sets a game code register to correspond to the desired game. The receiver examines the incoming digits of the game delivery channel for a game identification number corresponding the game code register. Upon finding such a match, the next following sequence of instructions is input into memory of the receiver. The memory of the game controller is loaded with the desired game.

The Office action fails to show that some objective teaching in the prior art would lead one of ordinary skill in the art to combine the relevant teachings of the applied references. It is merely stated in the Office action the proposed modification to the primary reference to Baer is an obvious upgrade of technology. It is asserted "such an upgrade of technology was desirable in that it advantageously allowed new/different video games to have been selected and played by the user." Office action, p. 197. It is further baldly asserted "that it would have been obvious to have 'further' modified the system disclosed by Baer to have provided this video gaming software downloading feature/enhancement/capability/mechanism that was described in Jeffers at al." *Id.* This is not a suggestion to combine. The Office action simply states the benefits achieved if the references were to be combined. This is nothing more than hindsight reconstruction. As the Office action provides no objective evidence of a motivation to combine these references, a *prima facie* case of obviousness has not been established. For this reason alone, the Examiner's rejection should be withdrawn. Additional reasons why Bear and Jeffers alone or in combination fail to teach or suggest applicants' claimed subject matter are provided below.

**a. Independent Claim 84**

Claim 84 defines a method for a transmitter station to transmit a plurality of discrete signals that are organized at a receiver station into signals that have specified effects at the receiver station. In claim 84, video and two discrete signals are received and transmitted by the transmitter station. The discrete signals are for organizing into an organized signal. The organized signal is effective at the receiver station to generate or output a locally-generated image with the remotely-transmitted video. The locally-generated image is based on user specific data. The user specific data is stored at the receiver station prior to providing the organized signal and is based on information supplied by a user of the receiver station.

Baer fails to suggest user specific data stored at a receiver station. In the Office action, there is no suggestion that Baer includes such user specific data. Rather, the secondary reference to Jeffers is relied on. The selection set in the game code register of Jeffers is relied upon to show user specific data. However, claim 84 as amended sets forth that a locally generated image is based on the user specific data. There is no locally generated image in Jeffers that is based on the game selection code. The game selection code of Jeffers is merely used to identify the desired game program to be received. As there is no teaching in Jeffers that the game selection code is used by the game program for any purpose at all, there can be no suggestion that any image generated by the game program is based on the game selection code. Likewise, Baer simply outputs the game received on the television signal. There is no suggestion in Baer that any image created by the game is based in any manner on a game selection code. Accordingly, neither Baer nor Jeffers, taken alone or in combination, shows or suggests any locally generated image that is based on user specific data as set forth by claim 84.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of amended independent claim 84 as unpatentable over Baer in view of Jeffers be withdrawn.

**b. Independent Claim 93**

Claim 93 is directed to a method for a receiver station to receive discrete signals that are organized into a complete instruction with a specified effect. In claim 93, the receiver station receives, detects, and passes discrete signals found in an information transmission to a processor. The receiver station organizes the first discrete signal with the second discrete signal into an organized signal. The organized signal is effective to generate an image by processing user specific subscriber data. The user specific data is stored at the receiver station prior to the organizing of the organized signal and is based on information supplied by a user of the receiver station. The result is an outputted presentation of a video image and a coordinated display using the generated image and the video image.

In the Office action, claims 84 and 93 are rejected over Baer in view of Jeffers without distinction between the claims. Claim 93 sets forth generating an image by processing at least one user specific subscriber datum. In the Office action, game selection codes are relied upon to show user specific data. However, the game selection code of Jeffers is merely used to identify the desired game program. There is no teaching in Jeffers that the game selection code is processed in any manner during the execution of the game program. Likewise, Baer simply outputs the game received on the television signal. There is no suggestion in Baer that any game selection code is used in any manner during the game. Accordingly, neither Baer nor Jeffers, taken alone or in combination, shows or suggests generating an image by processing at least one user specific subscriber datum as set forth by claim 93.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of amended independent claim 93 as unpatentable over Baer in view of Jeffers be withdrawn.

**9. 35 U.S.C. § 103 (a) Rejection Based On Baer In View Of Jeffers And Hedger.**

Section VIII (18) of the Office action rejects claims 84, 93, 110, 123, 162, 167, and 171 under 35 U.S.C. § 103(a) as being unpatentable over Baer in view of Jeffers and further in view of the Teletext's "Telesoftware" as discussed in the publication "Telesoftware-Value Added Teletext" by J. Hedger et al. (Hedger).

Section VIII (18) fails to state a proper rejection of the claims. *See* response to Section VII of the Office action above. As an initial matter, it is not understood what is referred to by "Teletext's 'Telesoftware' as discussed" in Hedger as recited in the Office action. It is unclear whether or not this rejection is simply in view of the Hedger publication. If the is referring to some greater operation or knowledge of telesoftware than is described in Hedger, then the rejection lacks any showing that such unspecified telesoftware teaching is prior art to the instant claims.

The Examiner takes Official notice that it was notoriously well know in the art to have downloaded gaming software to receiving stations via the standard pages of a conventional teletext service. It is not clear of what the Examiner takes Official notice. Section VIII (18) relies heavily on Hedger. It is not clear what the Official notice adds that is not found in the Hedger publication. Applicants respectfully traverse the Official notice to the extent that it seeks to establish anything not disclosed in Hedger.

This rejection merely asserts, "it would have been obvious to have downloaded the video game 'software' to the receiver stations in the modified system of Baer via Teletext's 'Telesoftware.'" This broad conclusory statement is insufficient to establish a *prima facie* case of obviousness for at least two reasons. First, there is no discussion how such a modified system would render applicants' claims obvious. Claims 84 and 93 are not rendered obvious by Baer in view of Jeffers because the game selection codes relied upon by the Examiner to show user specific data not processed to generate an image. Hedger fails to correct this deficiency of Baer in view of Jeffers. There is no suggestion

in Hedger to generate an image by processing a game selection code. Second, the Office action provides no objective teaching that would lead one of ordinary skill in the art to combine the teachings of the references relied upon in the Office action.

For at least the above reasons, applicants respectfully request that the 35 U.S.C. §103(a) rejection of amended claims 84 and 93 as unpatentable over Baer in view of Jeffers and further in view of teletext's telesoftware be withdrawn.

#### **10. 35 U.S.C. § 103 (a) Rejection Based On Barnaby**

Section VIII (11) rejects claim 93 under 35 U.S.C. § 103(a) as being unpatentable over “‘standard’ Teletext decoders, e.g. of the type illustrated in the figure of US Patent #3,982,065 to Barnaby et al., when operating in a conventional ‘Mixed’ display mode.” U.S. Patent 3,982,065 is referred herein as Barnaby.

As an initial matter, it is not clear what prior art is asserted by the term “‘standard’ teletext decoders.” This rejection is improper for the reasons set forth above in response to Section VII of the Office action. It is not clear from this rejection what features of so-called “standard teletext decoders” are relied upon nor when such features may have become valid prior art under 35 U.S.C. § 102. In the Office action, at footnote 68, it is asserted that the “mixed” display mode was a notoriously well known and obvious alternative way in which teletext image data was desirably displayed. Applicants maintain that the prior art of record fails to include a teletext mixed mode which controls the generation of locally generated images as set forth by claim 93.

Throughout the Office action, it is asserted that applicants’ invention is little more than applicants’ own version of an “extended” teletext transmission scheme. Applicants maintain that regardless of the disparaging label applied, applicants’ invention includes features not found in the prior art. In particular, with respect to claim 93, applicants disclose a method of outputting a video presentation at a receiver station that includes a locally generated image based on user specific data. An example of this invention is the

generation of a graph of the performance of the user's stock portfolio and the coordinated output of this graph during the "Wall Street Week" television program. Accordingly, each receiver may display a graph that is specifically tailored to the user. This feature is not shown in Barnaby. Nor does the mere disclosure of displaying teletext with incoming video show this feature. This is because the teletext display at each receiver is identical for any given selected page, i.e. it is not based on user specific data.

Applicants have endeavored to clearly set forth the differences between teletext data and the signals set forth in the instant claims. Teletext data is merely image data that is converted into characters for display. The generation of a local image by processing a user specific subscriber datum is not accomplished by the teletext system of Barnaby. In footnote 67 of the Office action, it is asserted that data in the ROM of teletext character generators is user specific in the sense that different ROMs used at different receiver stations inherently contained different character bit pattern sets of different fonts depending on the manufacturer of the decoder bought by each respective user. This assertion cannot stand for at least three reasons. First, there is no such teaching in the prior art. Different ROMs do not inherently contain different character bit pattern sets. Second, even if different fonts are resident at different receivers, there is no suggestion that any such font data would be related to the user. As noted in the Office action, the font would be placed in ROM by the manufacturer, i.e. without any knowledge of the ultimate user. Such data is not specific to the user as it will not produce an image tailored to the user. Third, claim 93 is amended to set forth that the user specific subscriber datum is based on information supplied by a user of the receiver station. This amendment clearly distinguishes the user specific subscriber datum from any data in the teletext generator. The data in a teletext generator is not based on information supplied by a user of the receiver station.

For the above reasons, applicants respectfully submit that Barnaby and other teletext systems in the prior art of record do not show or suggest generating an image by



processing at least one user specific subscriber datum, where the at least one user specific subscriber datum is stored at the receiver station and is based on information supplied by a user of the receiver station. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of independent claim 93 as being unpatentable over “standard teletext decoders” be withdrawn.

**11. 35 U.S.C. § 103 (a) Rejection Based On Hedger  
And Gunn**

Section VIII (9) rejects claim 84 under 35 U.S.C. § 103(a) as being unpatentable over Hedger and the publication “A Public Broadcaster’s View of Teletext in the United States” by Gunn et al. (Gunn).

Claim 84 defines a method for a transmitter station to transmit a plurality of discrete signals that are organized at a receiver station into signals that have specified effects at the receiver station. In claim 84, video and two discrete signals are received and transmitted by the transmitter station. The discrete signals are for organizing into an organized signal. The organized signal is effective at the receiver station to generate or output a locally-generated image with the remotely-transmitted video. The locally-generated image is based on user specific data. The user specific data is stored at the receiver station prior to providing the organized signal and is based on information supplied by a user of the receiver station.

Hedger discusses methods for converting conventional teletext receivers into user-friendly quasi-microcomputers by adding a microprocessor and a memory to the teletext receiver. The microprocessor (using a preprogrammed “resident control program”) controls the teletext decoder to receive computer programs that are transmitted as regular teletext pages and then run on the microprocessor. The microprocessor may also control the teletext decoder to receive data from the teletext transmission to be processed by the computer program. The memory is used to store the computer program and any data selected from the teletext pages. Exemplary applications include self-

assessment programs (mortgage calculation, welfare rights) and information manipulation (search/locate data from regular teletext pages such as accessing stock market pages to compute the rise or fall in the value of a portfolio).

Gunn generally discusses potential benefits of teletext in U.S. public broadcasting. Gunn provides broad examples of possible systems using teletext in the U.S. However, no operational details are provided regarding any system. In one example, Gunn notes that as an investor watches “Wall Street Week,” he may analyze his portfolio using raw data and software supplied via teletext. Gunn assumes that the teletext decoder will be connected to the home computer. Gunn also notes the possibility of putting the teletext decoder in the home computer and possibly the computer into the television set. Gunn provides no details regarding the operation of such a system.

Claim 84 is amended to set forth that the locally generated image is for display coordinated with the video. Hedger and Gunn fail to show or suggest a signal that instructs a receiver station to generate or output a locally generated image for display coordinated with video. In the Office action, it is acknowledged that the telesoftware system of Hedger did not result in information that was displayed in conjunction with the display of a related TV signal broadcast. In the Office action, Gunn is relied upon to show this feature. Gunn merely mentions; “Or imagine an episode of the popular American public television program on the stock market and American economy Wall Street Week on the subject of how an investor should analyze his portfolio. As the guest explains what to do, the viewer is actually doing it at home with raw data and software supplied via teletext.” Gunn at 481. Gunn has not yet reached the invention set forth in claim 84. Gunn has not yet reached the point of combining the local image with the received video. In claim 84, the signal instructs the receiver station to generate or output a locally generated image for display coordinated with the video. Gunn fails to teach this feature. In fact, Gunn teaches away from this feature. Gunn specifically states that this example “assumes that the teletext decoder will be connected not only to the television

set, but also to the home computer.” Gunn at 481. Gunn describes executing, on a home computer, software supplied via teletext during the “Wall Street Week” program. *Id.* The telesoftware output is on the home computer, rather than on the television coordinated with the video. Gunn does not describe how to coordinate locally generated images with received video and does not contemplate doing so. Accordingly, the applied art is devoid of any suggestion of telesoftware that instructs a receiver station to generate or output a locally generated image for display in conjunction with video as set forth by claim 84.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 84 as being unpatentable over Hedger and Gunn be withdrawn.

**12. 35 U.S.C. § 103 (a) Rejection Based On VSA,  
Ciciora And Germany.**

Section VIII (4) rejects claim 80 under 35 U.S.C. § 103(a) as being unpatentable based on over a VSA-Videographic Systems of America brochure (VSA), the publication “Teletext Systems: Considering the Prospective User” by Walter Ciciora (Ciciora), and the British patent publication 959,274 naming Leslie Walter Germany as the inventor (Germany).

Claim 80 is a transmitter claim for an “origination transmitter station” (OTS) that transmits at least one control signal and at least one instruct signal to control operations at a downstream “intermediate transmitter station” (ITS) and a further downstream receiver station. The OTS transmits a signal having video and an instruct signal that controls operations at a receiver station. The OTS also transmits a control signal that controls operations at the ITS. The control signal is operative at the ITS to control the communication of the video and the instruct signal at the ITS. The instruct signal is operative at the receiver station to generate or output locally-generated video for display with the remotely-transmitted video at the receiver station.

Specifically, claim 80 as amended includes the step of transmitting a signal from an origination transmitter. The signal contains video and an instruct signal which is operative at the receiver station to instruct the receiver station to generate or output a locally generated portion of a video presentation based on data specific to a user of the receiver station for display coordinated with the video. Claim 80 further includes the step of transmitting a control signal from the origination transmitter, wherein the control signal is effective at the remote intermediate transmitter station to control the communication of the video and the instruct signal.

VSA is a brochure briefly describing VSA's teletext and videotex products. Applicants were made aware this brochure in connection with litigation involving a related patent and, thus, provided it to the Office. However, applicants are unaware of the date that the brochure was published. The "VSA" brochure has been cited by the Examiner for its allegedly clean illustration of a notoriously well known local TV station configuration. However, in absence of evidence establishing the date of the VSA brochure, the brochure cannot be relied upon to show that such a configuration was known prior to applicants' invention of the claimed subject matter. For this reason alone, this rejection of claim 80 should be withdrawn.

Ciciora is directed to an overview of teletext systems with an emphasis on how such systems could be implemented in the United States. Germany is directed to a cueing system to facilitate the insertion of local announcements, advertisements, and the like into television programs.

The Office action fails to show that some objective teaching in the prior art would lead one of ordinary skill in the art to combine the relevant teachings of the applied references. It is merely stated that it would have been obvious for the system of Germany to have desirably included data as described by Ciciora. Office action, p. 168. No support is identified for either of this broad conclusory statement. As the Office action provides no objective evidence of a motivation to combine these references, a *prima facie*

case of obviousness has not been established. For this reason alone, the Examiner's rejection should be withdrawn. Additional reasons why Germany, Mothersole, and Ciciora alone or in combination fail to teach or suggest applicants' claimed subject matter are provided below.

It is acknowledged in the Office action that claim 80 differs from the TV station structure illustrated in VSA. VSA does not suggest an instruct signal that is operative at the receiver station to generate or output a locally generated portion of a video presentation based on data specific to a user of a receiver station as set forth by claim 80 as amended. The supplementary overlays of page 848 of Ciciora are relied upon to show locally generated program related teletext images. Ciciora mentions that teletext pages may display sports statistics, scores, and program capsule summaries. There is no suggestion that any of these teletext pages are based on data specific to a user of the receiver station as set forth by amended claim 80. VSA in view of Ciciora therefore fails to suggest a locally generated portion of a video presentation based on data specific to a user of a receiver station.

VSA also fails to suggest a control signal effective at a remote intermediate transmitter station to control communication of video and the instruct signal to the receiver station. In the Office action, it is asserted it would have been obvious to have provided a cueing signal as set forth in Germany with the network programming of VSA to automate the commercial insertion process thereby providing the VSA system with all the advantages of Germany. Such a combination fails to suggest the claimed elements of claim 80. The control signal of claim 80 is effective to control communication of video and an instruct signal. The video is displayed in conjunction with a locally generated portion of the video presentation. The instruct signal instructs the receiver station to generate or output the locally generated portion. Germany is directed merely to cueing signals that trigger the insertion of local announcements or advertisements. Even should commercials or local announcements be inserted in the network video of VSA, there is

no suggestion that such announcements or commercials include any instruct signal or are output in conjunction with a locally generated portion of a video presentation.

For at least the above reasons, VSA in view of Ciciora and Germany fails to show or suggest each step of claim 80 as amended. Applicants respectfully request that the 35 U.S.C. §103(a) rejection of amended 80 over VSA, Ciciora, and Germany be withdrawn.

**13. 35 U.S.C. § 103 (a) Rejection Based On Germany  
In View Of Mothersole And Ciciora**

Section VIII (5) rejects claims 80 under 35 U.S.C. § 103(a) as being unpatentable over Germany in view of the publication “Teletext Signal Generation Equipment and Systems” by Peter L. Mothersole (Mothersole) and Ciciora.

Claim 80 includes the step of transmitting a signal from an origination transmitter. The signal contains video and an instruct signal which is operative at the receiver station to instruct the receiver station to generate or output a locally generated portion of a video presentation based on data specific to a user of the receiver station for display coordinated with the video. Claim 80 further includes the step of transmitting a control signal from the origination transmitter, wherein the control signal is effective at the remote intermediate transmitter station to control the communication of the video and the instruct signal.

Germany is directed to a cueing system to facilitate the insertion of local announcements, advertisements, and like into television programs. Mothersole is directed to summarizing the first five years of the implementation of teletext systems in the United Kingdom. Ciciora is directed to an overview teletext systems with an emphasis on how such systems could be implemented in the United States.

Germany includes no suggestion that its cue signals have the properties of the instruct or control signals set forth in claim 80. Mothersole is relied upon in the Office action to show instruct signals. Mothersole describes teletext distribution and mentions insertion of teletext pages at local TV stations. Ciciora mentions a teletext use where

teletext pages are overlaid or cut into the video. Claim 80 is amended to set forth that the locally generated portion of the video presentation is based on data specific to a user of the receiver station. There is no suggestion in Mothersole or Ciciora that any teletext page is based on data specific to a user of a receiver station.

Applicants respectfully request that the 35 U.S.C. §103(a) rejection of claim 80 as being unpatentable over Germany in view of Mothersole and Ciciora be withdrawn.

**14. 35 U.S.C. § 103 (a) Rejection Based On  
“Standardized” Teletext System Of The Type  
That Is Set Forth In The Publication Contained  
In “Appendix A” Of The Office Action**

Section VIII (6) rejects claim 80 under 35 U.S.C. § 103(a) as being unpatentable over “standardized” Teletext system of the type that is set forth in the publication contained in “Appendix A” of the Office action.

This rejection is plainly improper for the reasons set forth above in response to Section VII of the Office action. Accordingly, it should be withdrawn.

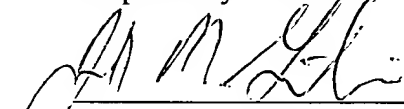
In any event, claim 80 is distinguishable over so-called “standardized teletext.” In the Office action, it is asserted that teletext which transmits instructions used to locally generate and display “boxed” images over the normal TV programming shows the first transmitting step of claim 80. The first transmitting step sets forth transmitting a signal that includes an instruct signal. Claim 80 is amended to set forth that the instruct signal is operative to instruct a receiver station to generate or output a locally generated portion of a video presentation based on data specific to a user of the receiver station for display coordinated with video. There is no suggestion in the UK Specification that any teletext signal instructs a receiver station to generate an image based on data specific to a user of the receiver station. Accordingly, the UK Specification fails to show or suggest the first transmitting step set forth in claim 80.

Applicants respectfully request that this 35 U.S.C. §103(a) rejection of claim 80 be withdrawn.

### III. CONCLUSION

In accordance with the foregoing, it is respectfully submitted that all outstanding objections and rejections have been overcome and/or rendered moot. Further, all pending claims are patentably distinguishable over the prior art of record, taken in any proper combination. Reconsideration and allowance of the instant application are respectfully requested.

Respectfully submitted,

  
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